6/30 034

Schulwitz, Paul

From:

Schultz, James

Sent:

Tuesday, June 29, 2004 3:23 PM

To:

Schulwitz, Paul

Subject:

score over length search 10/016,149

Hi Paul,

I need a score over length nucleotide sequence search against nucleobases 703 to 992 of SEQ ID NO:3 in the above entitled case. I need the lower and upper limits to be 8 and 50, respectively, I need any hits that are above 65% complementarity, and please transfer as many hits into the excel program as possible. If possible, please search the interference databases as well.

Thanks,

Doug Schultz

James Douglas Schultz, PhD AU 1635 (Biotechnology) Patent Examiner United States Patent and Trademark Office (Office) REM 2D18 (Mail) REM 2C18 (571) 272-0763 THIS PAGE BLANK (USPTO)

14.8 5.1 18 1 14.8 5.1 18 1 14.8 5.1 18 1 14.8 5.1 18 1 14.8 5.1 18 1 14.8 5.1 18 1 14.8 5.1 18 1 14.8 5.1 20 1 14	14.8 5.1 20 1 1 4.8 5.1 20 1 1 4.6 5.0 21 1 1 4.6 5.0 21 1 1 4.6 5.0 21 1 1 4.6 5.0 21 1 1 4.6 5.0 21 1 1 4.6 5.0 21 1 1 4.6 5.0 21 1 1 4.6 5.0 21 1 1 4.6 5.0 21 1 1 4.6 5.0 21 1 1 4.6 5.0 21 1 1 1 4.6 5.0 21 1 1 1 4.6 5.0 21 1 1 1 4.6 5.0 21 1 1 1 4.6 5.0 21 1 1 1 4.6 5.0 21 1 1 1 4.6 5.0 21 1 1 1 4.6 5.0 21 1 1 1 4.6 5.0 21 1 1 1 1 4.6 5.0 21 1 1 1 1 4.6 5.0 21 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	14.2 4.9 2.0 1 MACOUNTY 1 14.2 4.9 2.0 1 BD0118905 1 14.2 4.9 2.0 1 BD0118906 5 14.2 4.9 2.0 1 BD0118906 5 14.2 4.9 2.0 1 BD0118906 5 14.2 4.9 2.0 1 BD012806 5 14.2 4.9 2.0 1 BD12806 5 14.2 4.9 2.0 1 BD12806 5 14.2 4.9 2.0 1 BD196256 5 14.2 4.9 2.1 1 AR02652 4 14.8 2.1 1 AR02652 4 13.8 4.8 17 1 15383 2 1 1 AR02659 9 13.8 4.8 17 1 AR02659 9 13.8 4.8 18 1 AR02695 9 13.8 4.8 18 1 AR02693 9 13.8 4.8 18 1 AR02693 9 13.8 4.8 2.0 1 AR02693 9 13.8 4.8 2.0 1 AR02659 1 13.8 2.0 1 AR02659
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	OO O O OC		0 0000 0 0 0
Compugen Ltd. Compugen Seconds (without alignments)	· · · · · · · · · · · · · · · · · · ·	es edicted by chore of the real score dist	Description ACCESSION: BD088100 ACCESSION: BD088100 ACCESSION: BD088099 ACCESSION: BD088099 ACCESSION: AB0267850 ACCESSION: AB22444 ACCESSION: AX224040 ACCESSION: AX22401 ACCESSION: AX82435 ACCESSION: AX82801 ACCESSION: AX83830 ACCESSION: AX83830 ACCESSION: AX831834 ACCESSION: AX81834 ACCESSION: AX81834 ACCESSION: AX81834 ACCESSION: AX81831834 ACCESSION: AR81831834 ACCESSION: BD183181 ACCESSION: BD183181 ACCESSION: BD183181 ACCESSION: BD183181 ACCESSION: BD183181 ACCESSION: AX8797912
ore version 993 - 2004 g sw model :22:28 ; S	agag. t 0.5 esidu	% 25 summe results to the t	SUMMARIES ID BD0688100 BB0688100 BB0688100 BB067850 BB067850 BB0667850 BB067850 BB067850 BB08757 BB088757 AX1809 AX118091 AX531809 AX1809 AX193181 BB088060 AX643093 BBD137914 AX630639 BBD137914 AX643093 BBD183181 AX797912
GenCore (c) 1993 using a	nd Or C	To the series of	8
` 0	-149-3 lagtccci NUC 0 , Gaj	8 8 50 100 Match C 100 first 1 1.* 1.* 100 cerois	
Copyrig	us-10-016-149-3 290 1 tccagcgagtccc IDENTITY_NUC Gapop 10.0 , Ga	length: 6 length: 6 length: 5 minimum Maximum Listing rgedb: 4 is the 7 ater than	Mouery Carlot Street Carlot St
ic - nucle	score: table:	s grand	00000000000000000000000000000000000000
OM nucleic Run on:	of and bed	Minimum DB Maximum DB Post-proces Database : Pred: Score score	Nou No C C C C C C C C C C C C C C C C C C

ACCESSION: ARC41217
ACCESSION: ARC41219
ACCESSION: ARC42162
ACCESSION: ARC42162
ACCESSION: ARC421362
ACCESSION: ARC421362
ACCESSION: ARC41363
ACCESSION: ARC41363
ACCESSION: ARC4135
ACCESSION: ARC4135
ACCESSION: ARC4135
ACCESSION: ARC41064
ACCESSION: ARC41064
ACCESSION: ARC68810
ACCESSI

ACCESSION; AX236961 ACCESSION; AX246961 ACCESSION; AX496861 ACCESSION; AX496866 ACCESSION; BD03346 ACCESSION; BD131992 ACCESSION; BD131992 ACCESSION; BD131992 ACCESSION; BD131991 ACCESSION; AX4080194 ACCESSION; AX728614 ACCESSION; AX728614 ACCESSION; AX728619 ACCESSION; AX7218118 ACCESSION; AX7382303 ACCESSI
1 AR409534 AX326961 AX326961 BD038966 BD098966 BD098966 BD098966 BD098966 BD131992 BD131992 BD131992 BD131992 BD131992 BD131992 AR408026 AR408026 AR408026 AR408026 AR408026 AR408026 AR408026 AR408026 AR4080633 AR408026 AR4080633 AR408026 AR4080633
00000000000000000000000000000000000000
७ ७ ७ ७ ७ ७ ७ ७ ७ ७ ७ ७ ७ ७ ७ ७ ७ ७ ७
0000 0 000 0 00 00 00 00 00 00 00 00 00
ACCESSION: ID5698 ACCESSION: I15698 ACCESSION AR110891 ACCESSION AR29610 ACCESSION AR29690 ACCESSION AR2990
4.7 20 1 ED260089 4.7 20 1 I25698 4.7 20 1 I25698 4.7 20 1 I25698 4.7 20 1 AR310811 4.7 20 1 AR310811 4.7 20 1 AR3101081 4.7 20 1 AR3101081 4.7 20 1 AR3101091 4.6 17 1 AR314407 4.6 17 1 AR314417 4.6 17 1 AR314193 4.6 17 1 AR314191 4.6 17 1 AR314191 4.6 18 1 BD24950 4.6 19 1 AR31418 4.6 19 1 AR31418 4.6 20 1 AR31609 4.6 20 1 AR31609 4.6 20 1 AR31609 4.6 20 1 AR31619 4.6 20 1 AR31609 4.6 20 1 AR31619 4.6 20 1 AR31719
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

ACCESSION AR186585 ACCESSION AR189998	ACCESSION: AR309001	ACCESSION: AR31/132 ACCESSION: AR323216	ACCESSION:AR324975 ACCESSION:AR328065	ACCESSION: AR328075	ACCESSION: AR363926	ACCESSION:AR369047 ACCESSION:AR398437	ACCESSION: AR408828	ACCESSION:AR434003 ACCESSION:AR434004	ACCESSION: AX099951	ACCESSION: AX133964	ACCESSION: AX2145/U	ACCESSION: AX217022	ACCESSION:AX217175 ACCESSION:AX227687	ACCESSION: AX267014	ACCESSION: AX474888	ACCESSION: AX475339	ACCESSION: AX499148	ACCESSION: AX500262	ACCESSION: AX52/146 ACCESSION: AX530536	ACCESSION: AX531205	ACCESSION:AX531208 ACCESSION:AX531518	ACCESSION: AX531603	ACCESSION: AX532378	ACCESSION: AX532416	ACCESSION: AX555685	ACCESSION: AX672026	ACCESSION: AX672664	ACCESSION: AA68/513 ACCESSION: AX687771	ACCESSION: AX724213	ACCESSION: AX728257	ACCESSION: AX736384	ACCESSION: AX753897	ACCESSION: AX753898 ACCESSION: AX757321	ACCESSION: AX757586	ACCESSION: AX759717	ACCESSION:AX762343 ACCESSION:AX783340	ACCESSION: BD095925	ACCESSION:BD104499 ACCESSION:BD104751	ACCESSION:BD201187	ACCESSION: AR004600 ACCESSION: AR036682	ACCESSION:AR063241 ACCESSION:AR073045	CCESSION: AR08558	CCESSION	CCESSION: BD25059 CCESSION: BD25065	E07881	CCESSION
1 AR186585 1 AR189998 1 AR286447			1 AR324975 1 AR328065																																						AR06324 AR07304	AR08558		BD25059 BD25065	E07881	
17 17					1 1		-		-			-1-		-	-		-			П,		· ~ ·		117				4							111	rd rd	н.		Н.						н	1 1
4.4.4								4 4		4.4		4.2			4.4	4.2	4.2	4.4	4.2	4.2	4.4		4.4		4.4																				2.4	
12.2	70	101		'n٥	101	NN	Ni c	, v									ď			4		4		· ~ ·		i	oi c		oi o								o, o	. v.	oi o	, vi	~ ~	vi o	100	4 4		'n
c 326 327 328	C 329	, .,,	333	C 334	336	33.8 33.8	C 339	341	C 342	.,, .,	1 (-1	C 346	., ,,,	349	.,	c 352	(-)	., (-	c 356	357	323 323	360	362	c 363	(*) (*	c 366	367	369 C 369	(r) (r	1 (*1	C 373	375	377	378	י נייו ו	c 381 c 382	CD (385 385	C 386	η m.	389 390	c 391	3000	395	c 396 397	C 398
ACCESSION:AX10847 ACCESSION:AX129174 ACCESSION:AX131678	ACCESSION: AX259841	ACCESSION: AX362785	ACCESSION: BD023324	ACCESSION:BD089310 ACCESSION:BD089310	ACCESSION: BD188519	ACCESSION: AR041947	ACCESSION:AR130732 ACCESSION:AR370354	ACCESSION: AX637431	ACCESSION: AX637432	ACCESSION: ARISO616 ACCESSION: AR371296	ACCESSION: AX370480	ACCESSION: BD198664 ACCESSION: BD198664	ACCESSION: AR057479	ACCESSION: AR057569	ACCESSION: AR115237	ACCESSION: AR115327	ACCESSION: AR115409	ACCESSION: BDZ41108 ACCESSION: 132829	ACCESSION: AX045194	ACCESSION: AX226658	ACCESSION: AX226659 ACCESSION: AX227534	ACCESSION: AX227689	ACCESSION:AX531604 ACCESSION:AX531610	ACCESSION: AX634507	ACCESSION: AX634589 ACCESSION: AX634752	ACCESSION: AX725761	ACCESSION:AX730275 ACCESSION:AX730886	ACCESSION: AX734714	ACCESSION:AX735633 ACCESSION:AX737655	ACCESSION: AX757511	ACCESSION: AX758699 ACCESSION: AX760048	ACCESSION: BD008665	ACCESSION: BD104884	ACCESSION: BD202842 ACCESSION: BD202843	ACCESSION: AR130092	ACCESSION: BD250597 ACCESSION: AR215599	ACCESSION: AX229748	ACCESSION: BD088230	ACCESSION: AR066899	ACCESSION: BD132443	ACCESSION: A58319 ACCESSION: A60699	ACCESSION: AR039271	ACCESSION; AROSTOFIC	ACCESSION: AKIIS234 ACCESSION: BD255239	ACCESSION:BD256490 ACCESSION:BD256938	ACCESSION:153830
9 1 AX068847 9 1 AX129174 9 1 AX131678			٠,					ı 			Η,			Н г		٦	н г		ret i		-	Н.		Η.	- r	-1-		н.		٦,	- - -	ч.	-		Н.	- -	П.	4 ~		٠, ٦,					пп	ı
33 1.9 1.9 1.9																																														
6 4 4 .3 6 E. 4 .3	ਹਾ ਹਾ	4.4	የተ	44	44	. 4,	すす	4.	4 4	1 4	4,	4 4	4	4 4	. 4	4	4, 4	1 4	4	4 4	44	দ ব	r d	4.	4 4	4, 4	ক বা	4.	4 4	4.	* 4	4 4	4	44	4.4	4 4	4.4	4.	4 4	' T' T	1 4	4.4	' ব' ব	14	4.4.	4
12.6 12.6 12.6	4.4	40	10,0	44	4,0		9.9	8	ų,		4			0, 10		ά.				ر د د		9.5		oi c		9.0		2.0		40	, N	4 0	. d	. N	9.0				N N							
c 253 c 254 255		C 258		262		c 265	266		c 269			274		c 276							c 286		289		C 292		295 C 295	296	c 298	299	301	302		305 306	2007		c 310		313 C 314		317	318	320		c 323	325

ACCESSION: AR133224 ACCESSION: AR133225 ACCESSION: 161542 ACCESSION: 161542 ACCESSION: AK632963 ACCESSION: AK632963 ACCESSION: AK632963 ACCESSION: AK632963 ACCESSION: AK632963 ACCESSION: AR104210 ACCESSION: AR104085 ACCESSION: BD241541 ACCESSION: BD241541 ACCESSION: BD241541 ACCESSION: BD246491 ACCESSION: BD256491 ACCESSION: AR106090 ACCESSION: AR106090 ACCESSION: AR106090 ACCESSION: AR106090 ACCESSION: AR106090 ACCESSION: AR106090 ACCESSION: AR3234977 ACCESSION: AR324977	ACCESSION.AX214615 ACCESSION.AX215510 ACCESSION.AX215510 ACCESSION.AX216511 ACCESSION.AX216512 ACCESSION.AX226728 ACCESSION.AX226728 ACCESSION.AX226729 ACCESSION.AX265743 ACCESSION.AX265743 ACCESSION.AX24394 ACCESSION.AX324853 ACCESSION.AX324853 ACCESSION.AX324853 ACCESSION.AX324853 ACCESSION.AX324853
AR133224 AR133224 AR133224 AR4925927 AX4925937 AX4925997 AX6329653 AX6329653 AX6329653 AX6329653 AX6329653 AX6329653 AX6329653 AX6329653 AX63229653 AX63229653 AX63229653 AX63229653 AX105633 AX105665 AX105666 AX107494 AX1010666 AX107494 AX1010666 AX107497	
27.77.77.77.77.77.77.77.77.77.77.77.77.7	
00 000 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ACCESSION; AR198571 ACCESSION; AR215598 ACCESSION; AR214624 ACCESSION; AR234625 ACCESSION; AR23481857 ACCESSION; AR23532 ACCESSION; AR33333 ACCESSION; AR33333 ACCESSION; AR33333 ACCESSION; AR33333 ACCESSION; AR33333 ACCESSION; AR33233 ACCESSION; AR32333 ACCESSION; AR32333 ACCESSION; AR32333 ACCESSION; AR32333 ACCESSION; AR32333 ACCESSION; AR32333 ACCESSION; AR3234464 ACCESSION; AR323613 ACCESSION; AR323613 ACCESSION; AR323613 ACCESSION; AR324139 ACCESSION; AR324730 ACCESSION; AR324730 ACCESSION; AR324730 ACCESSION; AR324330 ACCESSION; AR32391 ACCESSION; AR32399	ACCESSION: AR215535 ACCESSION: AXX41335 ACCESSION: AXX41335 ACCESSION: BD066215 ACCESSION: BD066218 ACCESSION: A10641 ACCESSION: A11589 ACCESSION: A11589 ACCESSION: A88175 ACCESSION: A88175 ACCESSION: A88175 ACCESSION: A885175 ACCESSION: A88518 ACCESSION: AR113700 ACCESSION: AR113700
1.2 18 1 AR198571 1.2 18 1 AR214625 1.2 18 1 AR274625 1.2 18 1 AR274625 1.2 18 1 AR274625 1.2 18 1 AR293532 1.2 18 1 AR393532 1.2 18 1 AR393533 1.2 18 1 AR393533 1.2 18 1 AR39393 1.2 18 1 AX393333 1.2 18 1 AX393333 1.3 1 AX8211602 1.4 1 AX111602 1.8 1 AX393333 1.1 1 AX192933 1.1 1 AX19313	
222222222222222222222222222222222222222	ਜ਼ਿੰਜਿੰਜਜਜਜਜਜ

Q
Φ
н
•
Φ
Б
н

2222																								ת ת	~ ~	~ ~	-	K K			T, AL						т, т,	
нннг																																						
18 18 18	118	18	18	18	8 6	187	87 7	18	18	18	18	18	198	18	18	18	18	18	188	186	18	200	15	15	15	15	15	15 15	15	15	16 16	16	94	0 9 0	17	17	17	17
न्न्नुन						<u>: -:</u> :	٠. ١٠٠	۲	! ~!	년 년 년 년		! .	: :	۲. T.		 	다.	4.4	ורו רו			0.0	e. e. e. e.	o. o.	6.6	9.00	. o.	თ. თ.	6.0		2. w	6.6	9 6	ນູດເ	ייטי מיטי	ი. ი.ი.	ω ω ο ο	6. 6. 6. 6.
ব ব ব		•	•	4. 4.	4. 4	. 7	4. 4.	4. 4	•	•		•	•	•			•	` `	•																			
11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.6	11.4	11.4		11:		11.4										11.4
c 618 619 620	622 623 623		c 626 627		c 630		633 c 634	635	c 637	638 639	640	c 642	643 C 644		C 647		650 651	652	654	929	C 658	C 659	c 661 662	663	665	C 667	699	c 670 671	672	674	675	677	c 679	c 680 c 681	C 683	c 684 c 685	686 C 687	688 689
																																-						
ACCESSION: AX421714 ACCESSION: AX475566 ACCESSION: AX475567	149 150	259	567	590	454	164	855 856	857	931	519 082	671	807	541 683	776	267	386 427	962	189	816	891	600	036 583	180 181	182	342	497	226	227	188	r H	129	951	239	675	1763	520	4.6	571
(4217 (475 (475	(4 / 5) (4 9 9 1 (4 9 9 1	K5002	X544 X544	X671(X672;	X673	X674	X687.	X687	X722	X724 X726	X726	X728	X730 X730	X731	X732	X733 X735	X737 X739	X739	X750	X757	X759	X759 X760	X782 X782	X782	X783	D067	01198 01199	10199 10199	30201	18997	R055 R085	LR106	IR131	AR138 AR175	3D232 3D244	3D250	3449	AR187
SA: AS		ON: A	20 20 20 25 20 25	NO.	NO: A	ON: A:	A:NO	ON: A	ON: A	ON: A	ON: A	ON: A	ON:A	ON:A	ON: P	ON:A	ON:A	ON: NO	ON: N	S S S	ON:	ON:A	NO.	ON: A	NO.	ON	NO.	ON:	ON:	NO.	NO	NO	NO	7: NO.	ON:	ON:1	ON	10N:1
38810 38810 38810	5551(5551(5551(ESSI(ESSI(ESSI(ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESSI	ESS1	ESSI	ESSI	ESSI	ESSI	ESSI	TESS	TESS I	TESS]	CESS.	CESS
ACCI	ACCI	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	ACC	A	ACC	ACC	ACC	ACC	ACC	ACC	A	AGG	ACC	ACC	ACC	A A	A A	AG A	ACC	ACC ACC	ACC	ACC	ACC
AX421714 AX475566 AX475567	149 1150	566	1567	690	3454	1164	7855	7857	2931	4519 5082	5671	9807	0541 0683	1776	2267	3386	7962	9189	0816	7891	9009	9036	2180	2182	3342	7497	8663 9226	9227	1188	71	5129 5585	6951	1239	8064 5675	2060	0520	94	17571
X421 X475	X497	X500	X544 X544	X67	X67	7X677	4X68'	X68'	X72	4X72	X72	X72	4X73	4X73	K733	\$X73	AX73	AX73	AX75	AX75	AX 75	AX75 AX76	AX78	AX78	AX78	BD06	BD19 BD19	BD19	BD20	A88 0 A 899	AROS	AR10	AR13	AR13 AR17	BD23 BD24	BD25	E344	AR18
444																																						
117																																						
444	4 4 4	4.4	4.1	4.1	4.1	4.1	4.1	4.	4.4 	4.1	4.	4.1.	4.1	4.1	4.1.	4.1	4.1	44.	444	4.1.	4.1 4.1	4.4 1.1	4.4	4.4	. 4 	4.1.	4. 4. L. 4.	4.1	1.1.	4. 4.	4.4	4.	4.4.	4 4.	4.4	4 4	44	4.4
00000																																						
6 6 6 6 6 6	11.8	11.8	11.8	11.8	11.8	11.a 11.8	11.8	11.8	11.8 11.8	11.8	11.8	11.8	11.8 11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	111	11.8	11.8	11.8	11.8	11.	11.8	111	11.8	11.	11.	17.	111	11.
1111																																						
1111																																		~	60		m ++	
545 11. 546 11. 547 11.		551 552 552	553 554	555	557	559	560	562	563 564	565	567	268 569	570 571	572	574	575	577	579	C 581	583	584 585	586	588	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	592	594	595	597	599	600	602	604	909	c 607 608	c 609 610	611	c 613	615

ACCESSION: AX578615 ACCESSION: AX579297 ACCESSION: AX579298 ACCESSION: AX579992 ACCESSION: AX679990 ACCESSION: AX672986 ACCESSION: AX687509 ACCESSION: AX687510 ACCESSION: AX687510 ACCESSION: AX687511 ACCESSION: AX687511	ACCESSION: AX722618 ACCESSION: AX72218 ACCESSION: AX723286 ACCESSION: AX723286 ACCESSION: AX723211 ACCESSION: AX724181 ACCESSION: AX724181 ACCESSION: AX724181 ACCESSION: AX724181 ACCESSION: AX724286 ACCESSION: AX724236	ACCESSION: AX725289 ACCESSION: AX725286 ACCESSION: AX727864 ACCESSION: AX727864 ACCESSION: AX7278831 ACCESSION: AX728831 ACCESSION: AX728831 ACCESSION: AX728831 ACCESSION: AX728831 ACCESSION: AX738655 ACCESSION: AX731655 ACCESSION: AX731655 ACCESSION: AX731655	ACCESSION: AX732299 ACCESSION: AX732299 ACCESSION: AX7323950 ACCESSION: AX738232 ACCESSION: AX738232 ACCESSION: AX734259 ACCESSION: AX744259 ACCESSION: AX744261 ACCESSION: AX744261 ACCESSION: AX744261 ACCESSION: AX744261	ACCESSION: AXYS 6819 ACCESSION: AXYS 6819 ACCESSION: AXYS 6813 ACCESSION: AXYS 6823 ACCESSION: AXYS 6840 ACCESSION: AXY 61147 ACCESSION: AXX 61141 ACCESSION: BD0 67294 ACCESSION: BD0 67294 ACCESSION: BD199222 ACCESSION: AXE161797 ACCESSION: AXE134134 ACCESSION: AXE237744 ACCESSION: AXE237744 ACCESSION: AXE35254 ACCESSION: AXE35254 ACCESSION: AXE35254 ACCESSION: AXE35264 ACCESSION: AXE3608
1 AX578615 1 AX579297 1 AX579298 1 AX579992 1 AX67998 1 AX672946 1 AX672985 1 AX687519 1 AX687510 1 AX687510 1 AX687511	1 AX722618 1 AX722768 1 AX723188 1 AX723286 1 AX723511 1 AX724181 1 AX724181 1 AX724423 1 AX75124	1 AX725289 1 AX725586 1 AX72581 1 AX727864 1 AX72781 1 AX728834 1 AX728881 1 AX730590 1 AX730590 1 AX731505	1 AX732232 1 AX732532 1 AX732632 1 AX735131 1 AX735131 1 AX73512 1 AX74260 1 AX744261 1 AX744263 1 AX744263 1 AX744263 1 AX744263 1 AX744263 1 AX760818	AX758113 AX758113 AX758213 AX758213 AX758213 AX7584600 AX7584600 AX761147 AX761147 AX761241 BD067294 BD067294 AX71944 AX234134 AX234134 AX234134 AX234167 AX531607 AX531607 AX531608 BD085655 BD085655 AX531607 AX531607 AX531607 AX531607 AX531607 AX531608
				11777777777777777777777777777777777777
		, , , , , , , , , , , , , , , , , , ,		л пин пин пин и и и и и и и и и и и и и и
444444444444 		* * * * * * * * * * * * * * * * * * *		; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;
C C C C C C C C C C C C C C C C C C C	C 775 776 777 777 779 780 781 783	0 0 7999		6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ACCESSION: E08629 ACCESSION: E08630 ACCESSION: 130320 ACCESSION: 146519 ACCESSION: 146519 ACCESSION: 146520 ACCESSION: AR189929 ACCESSION: AR1899330 ACCESSION: AR1899330 ACCESSION: AR1899330 ACCESSION: AR1999330 ACCESSION: AR1999330 ACCESSION: AR1999330 ACCESSION: AR199930 ACCESSION: AR199930		70000000000	0000000000000	ACCESSION: AX266647 ACCESSION: AX266648 ACCESSION: AX422539 ACCESSION: AX422539 ACCESSION: AX422540 ACCESSION: AX422540 ACCESSION: AX422540 ACCESSION: AX422540 ACCESSION: AX47550 ACCESSION: AX49914 ACCESSION: AX49914 ACCESSION: AX49914 ACCESSION: AX49914 ACCESSION: AX59144 ACCESSION: AX530694 ACCESSION: AX530694 ACCESSION: AX530694 ACCESSION: AX530694 ACCESSION: AX530694 ACCESSION: AX530694 ACCESSION: AX530446 ACCESSION: AX530446 ACCESSION: AX532446
наничичнич	+	на па на па на	ладалалала на	117 1 AX266647 17 1 AX266648 17 1 AX422539 17 1 AX422540 17 1 AX422541 17 1 AX422541 17 1 AX422541 17 1 AX42344 17 1 AX499144 17 1 AX499144 17 1 AX59145 17 1 AX530692 17 1 AX530694 17 1 AX530696 17 1 AX532446 17 1 AX532446 17 1 AX532446 17 1 AX532446 17 1 AX532446 17 1 AX532446 17 1 AX532446
		. თ თ თ თ თ თ თ თ თ თ თ თ	ຑຑຑຑຑຑຑຑຑຑ ຑ	
य चं चं च च च च च च च च च च		' ਹਾ ਹਾ ਹਾ ਹਾ ਹਾ ਹਾ ਹਾ ਹਾ ਹ	ਧਿਧਾਰ ਚਾਹਾਰਾ ਚਾਹਾਰਾ ਚਾਹਾਰਾ	
691 692 693 694 695 696 701 701			725 726 727 730 731 732 734 735	0 0 7338

		44444444	напапапап		даннананана	17 1 AX500263 17 1 AX500674 17 1 AX500675 17 1 AX527145 17 1 AX530535 17 1 AX530537 17 1 AX53151 17 1 AX531209 17 1 AX531209 17 1 AX531217 17 1 AX531217 17 1 AX531517 17 1 AX531517 17 1 AX531517 17 1 AX531517
		,	**************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~	
	919 920 11. 922 923 11. 924 11.	928 929 111 930 111 932 111 933 111 934 111		9485 9446 9446 9449 950 952 111 953 111 954 111		969 970 111 972 111 974 111 974 111 976 111 978 111 980 111 981
ACCESSION: AR027271 ACCESSION: AR040171 ACCESSION: AR045749 ACCESSION: AR045751 ACCESSION: AR046792 ACCESSION: AR046824 ACCESSION: AR046826 ACCESSION: AR052183 ACCESSION: AR052183	ACCESSION: AR0690182 ACCESSION: AR069075 ACCESSION: AR078415 ACCESSION: AR078416 ACCESSION: AR104490 ACCESSION: AR1104490 ACCESSION: AR1134524	ACCESSION: ARI 47206 ACCESSION: BD253937 ACCESSION: BD254258 ACCESSION: BD254540 ACCESSION: BD255119 ACCESSION: BD255119 ACCESSION: BD255590 ACCESSION: BD255590 ACCESSION: BD255590	ACCESSION: E05533 ACCESSION: 137527 ACCESSION: 137528 ACCESSION: 137554 ACCESSION: 152801 ACCESSION: 152803 ACCESSION: 153874 ACCESSION: 153876 ACCESSION: 153876	ACCESSION: 194377 ACCESSION: 194378 ACCESSION: 194404 ACCESSION: AR183020 ACCESSION: AR183024 ACCESSION: AR191864 ACCESSION: AR292457 ACCESSION: AR202457 ACCESSION: AR254897 ACCESSION: AR254897 ACCESSION: AR258362	ACCESSION: AR262702 ACCESSION: AR266191 ACCESSION: AR266191 ACCESSION: AR226617 ACCESSION: AR325759 ACCESSION: AR325759 ACCESSION: AR325751 ACCESSION: AR327518 ACCESSION: AR327518 ACCESSION: AR327518 ACCESSION: AR327518 ACCESSION: AR327590 ACCESSION: AR327590	ACCESSION: AR3 23.26 ACCESSION: AR3 23.26 ACCESSION: AR3 24.88 ACCESSION: AR3 6008 ACCESSION: AR3 6008 ACCESSION: AR3 72.80 ACCESSION: AR3 98.181 ACCESSION: AR3 98.181 ACCESSION: AR4 98.25 ACCESSION: AR4 98.25 ACCESSION: AR4 08.25 ACCESSION: AR4 08.27 ACCESSION: AR4 08.27 ACCESSION: AR4 08.37 ACCESSION: AR4 08.37 ACCESSION: AR4 123.07 ACCESSION: AR4 123.07
наннання	ппппппппппппппппппппппппппппппппппппппп	аааааааа	44444444	данананана	4.	17 1 AR3.22.69 17 1 AR3.22.69 17 1 AR3.42488 17 1 AR3.60089 17 1 AR3.72.680 17 1 AR3.98.181 17 1 AR4.089.25 17 1 AR4.088.26 17 1 AR4.088.26 17 1 AR4.088.26 17 1 AR4.088.34 17 1 AR4.088.34 17 1 AR4.088.34
		<u> ஸ்ஸ்ஸ்ஸ்ஸ்ஸ்ஸ</u> ா	1 M M M M M M M M M M	мичимими мичи по г		
		#10.50 K & 6.0 T C	8868 8663 8665 8666 870 871	872 873 874 874 875 876 877 8879	ប្រភព្ទុក្ខ ខេត្ត ក្នុក្ខិត្ត ព្រះ ក្នុង ខេត្ត ក្នុង ខេត្ត ព្រះ ក្នុង ខេត	8895 8995 8999 8999 0002 0002 0004 0005 0008

ACCESSION: AR433789
ACCESSION: AR434002
ACCESSION: AR434005
ACCESSION: AX015299
ACCESSION: AX133961
ACCESSION: AX133961
ACCESSION: AX133963
ACCESSION: AX133963
ACCESSION: AX216564
ACCESSION: AX216286
ACCESSION: AX216286
ACCESSION: AX216334
ACCESSION: AX216334
ACCESSION: AX216333
ACCESSION: AX263333
ACCESSION: AX263393
ACCESSION: AX263393
ACCESSION: AX263393
ACCESSION: AX263393
ACCESSION: AX264611
ACCESSION: AX2643333
ACCESSION: AX2643355
ACCESSION: AX266291
ACCESSION: AX266300
ACCESSION: AX23333
ACCESSION: AX266290
ACCESSION: AX233333
ACCESSION: AX4733340
ACCESSION: AX4733340
ACCESSION: AX4733340
ACCESSION: AX475338
ACCESSION: AX475338
ACCESSION: AX4753306
ACCESSION: AX4753306
ACCESSION: AX4753306
ACCESSION: AX4753306
ACCESSION: AX4753306
ACCESSION: AX4753308
ACCESSION: AX4753306
ACCESSION: AX4753308
ACCESSION: AX4753306
ACCESSION: AX4753306
ACCESSION: AX4753308
ACCESSI

TQ
Φ
н
•
ø.
б
Й

ACCESSION: AX735840 ACCESSION: AX736360 ACCESSION: AX737119 ACCESSION: AX737583 ACCESSION: AX737582 ACCESSION: AX738265	ACCESSION: AX739754 ACCESSION: AX744990 ACCESSION: AX744991 ACCESSION: AX753896 ACCESSION: AX753896	ACCESSION: AX757868 ACCESSION: XX758458 ACCESSION: AX758679 ACCESSION: AX758679 ACCESSION: AX759669	ACCESSION: AX759856 ACCESSION: AX769857 ACCESSION: AX760278 ACCESSION: AX761146 ACCESSION: AX761495	ACCESSION: AX782946 ACCESSION: AX782946 ACCESSION: AX782275 ACCESSION: AX782339 ACCESSION: AX7866028 ACCESSION: AX799933	ACCESSION: BD067431 ACCESSION: BB073209 ACCESSION: BD104500 ACCESSION: BD104502 ACCESSION: BD104502 ACCESSION: BD199999 ACCESSION: BD197630	ACCESSION: BDL 94945 ACCESSION: BD201235 ACCESSION: BD201555 ACCESSION: BD201555 ACCESSION: AR215599 ACCESSION: AR215599 ACCESSION: AR216699 ACCESSION: AR31609	ACCESSION: BD124425 ACCESSION: BD124425 ACCESSION: ARIG 7712 ACCESSION: E29596 ACCESSION: E34702 ACCESSION: BD101494 ACCESSION: BD101941 ACCESSION: BD101941 ACCESSION: A77232	ACCESSION: AB9502 ACCESSION: AR9502 ACCESSION: AR113484 ACCESSION: IS7891 ACCESSION: IS7891 ACCESSION: AR180643 ACCESSION: ARX 9644 ACCESSION: ARX 9280 ACCESSION: ARX 9280 ACCESSION: ARX 9280 ACCESSION: BD067015 ACCESSION: BD067015
1 AX735840 1 AX736360 1 AX737119 1 AX737583 1 AX737941 1 AX738269 1 AX738265 1 AX738365 1 AX738365 1 AX738365	1 AX739754 1 AX744990 1 AX744991 1 AX753896 1 AX753899	1 AX757868 1 AX758458 1 AX758603 1 AX758679 1 AX759402 1 AX759669	1 AX759856 1 AX759857 1 AX761146 1 AX761450 1 AX761495	AX702946 AX782274 AX782275 AX783339 AX786028 AX79933	BD067431 BD073209 BD102096 BD104500 BD10451 BD105131 BD137530	BD201235 BD201235 BD201255 BD205502 BD205037 AX207609 AX004061	AX6.28041 BD1.24425 AR167712 E29596 E38702 E64128 BD061494 BD101941 A07222 A33056	A89502 1 AR033662 1 AR033662 1 157891 1 157891 1 161718 1 AX374614 1 AX374614 1 AX572880 1 AX536200 1 BD067015
								2000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
						, (1) (1) (1) (1) (1) (1) (1) (1)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
111111111111111111111111111111111111111	22.22.22.22.22.22.22.22.22.22.22.22.22.						[‡] ####################################	
1056 1057 1059 1059 1060 1063 1063 1064	1066 1067 1068 1069	C1071 1072 C1073 1074 C1075	1077 1078 C1079 C1080 C1081	C1084 C1085 C1087 C1088	10095 10095 10096 10096 10096	c1100 1101 c1102 c1103 c1104 1105	C1100 11009 11110 11113 11114 11115 C11117	1118 C1119 C1120 C1121 C1122 C1123 C1124 1125 1126 1127
ACCESSION:AX532240 ACCESSION:AX532241 ACCESSION:AX532377 ACCESSION:AX532337 ACCESSION:AX532415 ACCESSION:AX532417 ACCESSION:AX532427 ACCESSION:AX532428 ACCESSION:AX532438 ACCESSION:AX532438	ACCESSION: AX57852 ACCESSION: AX578523 ACCESSION: AX580204 ACCESSION: AX634493 ACCESSION: AX648387	ACCESSION: XX64838 ACCESSION: XX64839 ACCESSION: XX64839 ACCESSION: XX673189 ACCESSION: XX67318	ACCESSION: AX6 74449 ACCESSION: AX6 74449 ACCESSION: AX6 76064 ACCESSION: AX6 87710 ACCESSION: AX6 87770 ACCESSION: AX6 87770	ACCESSION:AX688667 ACCESSION:AX690323 ACCESSION:AX690324 ACCESSION:AX691884 ACCESSION:AX691884 ACCESSION:AX691888	ACCESSION: XX693226 ACCESSION: AXX693226 ACCESSION: AXX722607 ACCESSION: AX722833 ACCESSION: AX723177 ACCESSION: AX723192 ACCESSION: AX723192	ACCESSION: AX724290 ACCRSSION: AX724662 ACCESSION: AX724690 ACCESSION: AX724143 ACCESSION: AX726119 ACCESSION: AX726116 ACCESSION: AX726116 ACCESSION: AX726565 ACCESSION: AX726565	ACCESSION: AX727077 ACCESSION: AX727073 ACCESSION: AX7272492 ACCESSION: AX7272165 ACCESSION: AX722165 ACCESSION: AX730128 ACCESSION: AX730128 ACCESSION: AX730185 ACCESSION: AX730185 ACCESSION: AX730185 ACCESSION: AX730185	SSISSISSISSISSISSISSISSISSISSISSISSISSI
аддадаааа.		44444			пппппппп		ннаннанна.	1 AX731504 1 AX731504 1 AX732805 1 AX733345 1 AX733995 1 AX734054 1 AX734152 1 AX734152 1 AX735661 1 AX735664
69 69 7.11 69 7.11 69 7.11 69 7.11 7.11 7.11 7.11 7.11 7.11 7.11	ngggg	, თ, თ თ თ თ თ	. あ あ あ あ あ あ	თთთთთთთ	aaaaaaaa	നെ തെ തെ തെ തെ ത		, a,
				м м м м м м м 	ммммммм	м м м м м м м м м м		111.2 111.2 111.2 111.2 111.2 11.2 11.2
00 00 00 00 00 00 00 00 00 00 00 00 00			ппппппп	ппппппп		яннянняній	есеенаныный ###	4 = 3 = 3 = 3 = 3 = 3

α
O)
Н
•
Φ
þ
Н

C1202 10.8 3.7 16 1 AR157691 1203 10.8 3.7 16 1 107129 ACCESSION:AR157691 C1204 10.8 3.7 16 1 107129 ACCESSION:B39139 ACCESSION:B39139 ACCESSION:B39139 ACCESSION:B39139 ACCESSION:B39139 ACCESSION:I0729 ACCESSION:I16252 ACCESSION:AR203384 ACCESSION:AR203384 ACCESSION:AR203384 ACCESSION:AR203384 ACCESSION:AR203384 ACCESSION:AR30403 ACCESSION:AR30403 ACCESSION:AR30403 ACCESSION:AR30403 ACCESSION:AR30403 ACCESSION:AR30403 ACCESSION:AR30403 ACCESSION:AR30403 ACCESSION:AR30403 ACCESSION:AR304182 ACCESSION:AR304182 ACCESSION:AR304182 ACCESSION:AR304183 ACCESSION:AR304183 ACCESSION:AR306103 ACCESSION:AR306103 ACCESSION:AR306103 ACCESSION:AR306103 ACCESSION:AR306103 ACCESSION:AR3068103 ACCESSION:AR3069103 ACCESSION:AR306303 AC	RESULT 1 BD088100/c LOCUS LOCUS DDFINITION A method of arraying genome clone. ACCESSION VERSION VERSION VERSION SOURCE SOURCE SOURCE SYNTHATIC CONSTRUCT ORGANISM STITITICAL A TELEVICAL CONSTRUCT SOURCE STATE OF SOURTH CONSTRUCT ORGANISM STITITICAL A TELEVICAL CONSTRUCT SOURCE STATE OF SOURTH CONSTRUCT ATTITITICAL CONSTRUCT ORGANISM STITITICAL CONSTRUCT ATTITITICAL CONSTRUCT SOURCE STATE OF SOURCE ATTITITICAL CONSTRUCT ORGANISM STATE OF SOURCE STATE OF SOURCE ATTITITICAL CONSTRUCT ORGANISM STATE OF SOURCE	A method of arraying genome clone Patent: JP 2001321190-A 344 20-NOV-2001; THE INSTITUTE OF PHYSICAL AND CHEMICAL RESE GENOTECHS OS Artificial Sequence PN JP 2001321190-A/344 PD 20-NOV-2001 PF 12-MAR-2001 JP 2001068285 PI EIICHI SOEDA PC C12N15/09, C12N15/09, C12M1/00, C12Q1/68, C12N15/00 PC C12N15/00	FRATURES FRATURES 1. 24 Source 1. 24 / Organism="synthetic construct" / Granism="synthetic co
ACCESSION: BD208393 ACCESSION: BD208933 ACCESSION: BD208933 ACCESSION: A10634 ACCESSION: A10639 ACCESSION: A11587 ACCESSION: A11587 ACCESSION: A11587 ACCESSION: A11587 ACCESSION: A115915 ACCESSION: A1164886 ACCESSION: A11044 ACCESSION: A11054 ACCESSION: A116488	ACCESSION: AR029846 ACCESSION: AR041345 ACCESSION: AR041346 ACCESSION: AR041333 ACCESSION: AR041833 ACCESSION: AR041833 ACCESSION: AR131771 ACCESSION: AR131772 ACCESSION: AR131772 ACCESSION: 161541 ACCESSION: 161606 ACCESSION: 161606 ACCESSION: 161730 ACCESSION: 161730 ACCESSION: 161730 ACCESSION: 161730 ACCESSION: 161730 ACCESSION: 161730	ACCESSION: ARI 8495 ACCESSION: ARI 8495 ACCESSION: AR3 49717 ACCESSION: AR3 49717 ACCESSION: AX63 5964 ACCESSION: AX63 5964 ACCESSION: AX63 5964 ACCESSION: AX63 6183 ACCESSION: AX63 6846 ACCESSION: AX63 6846 ACCESSION: AX63 6846 ACCESSION: AX63 6846 ACCESSION: AX63 6847 ACCESSION: AX63 6848	ACCESSION: BD066920 ACCESSION: BD066922 ACCESSION: BD066922 ACCESSION: BD066968 ACCESSION: BD209016 ACCESSION: BD209017 ACCESSION: A88005 ACCESSION: A88005 ACCESSION: A88105 ACCESSION: A88105 ACCESSION: A88120 ACCESSION: A8139912 ACCESSION: AR03320 ACCESSION: AR139941 ACCESSION: AR139941 ACCESSION: AR140260 ACCESSION: AR140260
3.8 15 1 BD208393 3.8 16 1 A09436 3.8 16 1 A09436 3.8 16 1 A10839 3.8 16 1 A11587 3.8 16 1 AR328572 3.8 16 1 AR328572 3.8 16 1 AR328572 3.8 17 1 AR47206 3.8 17 1 AR40490 3.9 17 1 AR40490 3.7 14 1 AR404805 3.7 14 1 AR404805 3.7 14 1 AR404805 3.7 14 1 AR404805 3.7 15 1 AR50948 3.7 15 1 AR50948 3.7 15 1 AR50948 3.7 15 1 AR509699	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1

```
and Soeda, E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                   at 1p36.
AB067850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21269192
11374902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    misc feature
         FF
                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 5
AR204040/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                        RESULT 4
AB067850
                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                  VERSION
                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rocus
                                                                                                                                                                              à
                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                AB067851 24 bp DNA linear SYN 21-MAY-2003
Synthetic construct DNA, reverse primer for human STS sts-stSG1697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PC
                                                                                                                                                                     Chen, Y.Z., Hayashi, Y., Wu, J.G., Takaoka, E., Maekawa, K., Watanabe, N., Inazawa, J., Hosoda, F., Arai, Y., Mizushima, H., Morohashi, A., Ohira, M., Nakagawara, A., Liu, S., Hoshi, M., Horli, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. 724 / Inote="reverse primer for human STS sts-stSG1697 at 1p36 sts-stSG1697 obtained from clones B83K22, B47P3, B43E2, B123D13, B290B2and B82D16 , Human BAC library RPCI-11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Artificial Sequence
JP 2001321190-A/343
20-NOV-2001
12-NAR-2001
TP 2001068285
EIICHI SOEDA
CI2N15/09,C12N15/09,C12M1/00,C12Q1/68,G01N33/53,G01N33/566, I
                                                                                                                                                                                                                                                                                                                                  Direct Submission
Submitted (04-AUG-2001) Akira Horii, Tohoku University School of Submitted (04-AUG-2001) Akira Horii, Tohoku University School of Medicine, Molecular Pathology; 2-1 Seiryomachi, Aoba-ku, Sendai, Miyagi 980-8575, Japan (E-mail:horii@mail.cc.tohoku.ac.jp, Tel:81-22-717-8047)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
                                                                                                                                                                                                                                A BAC-based STS-content map spanning a 35-Mb region of human chromosome 1p35-p36 (2001) (21269192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A method of arraying genome clone
Patent: JP 2001321190-A 343 20-NOV-2001;
THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH, YUGENKAISHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Description of Artificial Sequence:Synthetic DNA FH Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8.3%; Score 24; DB 1; Length 24;
.00.0%; Pred. No. 2.9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 Similarity 100.0%; Fred. No. 2.9
24; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 bp A method of arraying genome clone. BD088099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      966 GACTCTCTAAATCTGGTGTATGGG 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24 GACTCTCTAATCTGGTGTATGGG 1
                                                                            AB067851.1 GI:15128655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD088099.1 GI:22633709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JP 2001321190-A/343.
Synthetic construct
synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 20)
                                                                                                                         synthetic construct artificial sequences.
                                                                                                           synthetic construct
                                                                                                                                                                                                                                                                                                           2 (bases 1 to 24)
Horii, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C12N15/00
                                                                                                                                                                                                                     and Soeda, E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                              at 1p36.
AB067851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENOTECHS
                                                                                                                                                                                                                                                                                             11374902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Soeda, E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OS PN PN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20
AB067851/c
                LOCUS
                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                           MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                            ACCESSION
                                                                                                                                                        REFERENCE
                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 3
BD088099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                            VERSION
                                                                                                                                                                                                                                TITLE
                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
```

à

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SYN 21-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                AB067850 20 bp DNA linear SYN 21-MAY-2003
Synthetic construct DNA, forward primer for human STS sts-stSG1697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chen,Y.Z., Hayashi,Y., Wu,J.G., Takaoka,E., Maekawa,K.,
Watanabe,N., Inazawa,J., Hosoda,F., Arai,Y., Mizushima,H.,
Morohashi,A., Ohira,M., Nakagawara,A., Liu,S., Hoshi,M., Horii,A.

    1. -20
/note="forward primer for human STS sts-stSG1697 at 1p36
sts-stSG1697 obtained from clones B83K22, B47P3, B43E2,
B123D13, B290B2, B82D16 , Human BAC library RPCI-11"

                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        [bases 1 to 20)

Horit,A.

Horit,A.

Bubmitsed (04-AUG-2001) Akira Horii, Tohoku University School Medicine, Molecular Pathology; 2-1 Seiryomachi, Aoba-ku, Senda Miyagi 980-8875, Japan (E-mail:horii@mail.cc.tohoku.ac.jp, Tel:81-22-717-8042, Fax:81-22-717-8047)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A BAC-based STS-content map spanning a 35-Mb region of human
                                                                                                                                                                                                                               ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
organism='Artificial Sequence'.
                                                                                                                                                                              DB 1; Length 20;
                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 6.9%; Score 20; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 15; Matches 20; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                 1. .20
/organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                    Query Match
6.9%; Score 20; DB
Best Local Similarity 100.0%; Pred. No. 15;
Matches 20; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 152 from patent US 6365569.
                                                                                                /mol_type="genomic DNA"
/db_xref="taxon:32630"
                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               chromosome 1p35-p36
Genomics 74 (1), 55-70 (2001)
                                                                                                                                                                                                                                                                         869 GGAACACTITCCTGAGATGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         869 GGAACACTTTCCTGAGATGC 888
                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AB067850.1 GI:15128654
                                                                                                                                                                                                                                                                                                        1 GGAACACTITCCTGAGAIGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR204040.1 GI:21500584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAACACTTTCCTGAGATGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct
synthetic construct
artificial sequences.
```

```
Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                           REFERENCE
AUTHORS
TITLE
                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                        RESULT 8
AX666494
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 9
A98535
                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 16-SEP-2000
                                                                                                                                                      ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C12P21/08, C12Q1/68, G01N33/15, G01N33/50, G01N33/53, G01N33/53, PC
                                                                                                                                                                                                                                                                                PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-OCT-2002
06-JAN-2000 JP 2000592416
06-JAN-1999 GB 9900167.9
ALEXANDER FRED MARKHAM, DAVID BONTHRON
C12N15/09, A01K67/027, A61K38/00, A61K48/00, A61P17/02, C07K14/47,
                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 25)
Markham,A.F. and Bonthron,D.
Wound healing and orofacial clefting
Patent: JP 2002534963-A 5 22-OCT-2002;
UNIVERSITY OF LEEDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                       Gaps
1 (bases 1 to 24)
Tang,L. and Blehm,E.Scot.
Dirofilaria and Brugia ankyrin proteins and uses thereof
Patent: US 635569-A 152 02-APR-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism='Homo sapiens (human)'.
Location/Qualifiers
                                                                                                                           DB 1; Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G01N33/577, G01N33/68, C12N15/00, A61K37/02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                BD263156 25 bp DN Wound healing and orofacial clefting.
                                                                                                                                       Pred. No. 66;
0; Mismacches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         83;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                              /mol_type="unassigned DNA"
                                                                                                                         Query Match 5.9%; Score 17.2; Best Local Similarity 86.4%; Pred. No. 66 Matches 19; Conservative 0; Mismacche
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5.8%; Score 16.8; 90.0%; Pred. No. 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX027049 25 bp Sequence 7 from Patent WO0040719.
                                                                                                                                                                                 905 CTGCGATCAGATTATCATCACC 926
                                                                                 /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide Primer
                                                                                                                                                                                                            crércarcarrarcricace 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   950 CAAGAAGAGCCAAATTGACT 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAGAACAGCCATATTGACT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
JP 2002534963-A/5
                                                                                                                                                                                                                                                                                                                         BD263156.1 GI:33072924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GI:10188064
                                                                                                                                                                                                                                                                                                                                     JP 2002534963-A/5.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                     1. .24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          G01N33/566,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX027049.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                          BD263156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Simi
Matches 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OS
PN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PD
PR
PC
PC
PC
                                                                                                                                                                                                            22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
AX027049
LOCUS
DEFINITION
                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                        JOURNAL
FEATURES
 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                    RESULT 6
BD263156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                          g
```

```
Bonthron, D. and Markham, A.F.
Wound healing and orofacial clefting
Patent: WO 0040719-0 7 13-JUL-2000;
BONTHRON DAVID (GB); UNIV LEEDS (GB); MARKHAM ALEXANDER FRED (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 26-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 26-JAN-2000
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Edelman, L., Jacotot, E. and Briand, J.P.
Chimeric molecules containing a module able to target specific cells and a module regulating the apoptogenic function of the permeability transition pore complex (ptpc)
Patent: WO 02061105.4 287 08-AUG-2002;
INSTITUT PASTEUR (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                      .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 23;
                                                                                                                                                                                                                                                                                                                         Length 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                      2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: WO 9911778-A 10 11-MAR-1999;
HIGENBOTTAM TIMOTHY (GB); MCCORMACK KEITH (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 20)
Higenbottam, T. and Mccormack, K.
ANTISENSE TREATMENT OF PULMONARY HYPERTENSION
                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .23
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noTe="Primer"
                                                                                                                                                                               1..25
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
/note="Oligonucleotide Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23 bp I Sequence 287 from Patent W002061105. AX666494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5.7%; Score 16.6; I
82.6%; Pred. No. 82;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                         5.8%; Score 16.8; I
90.0%; Pred. No. 83;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 10 from Patent WO9911778. A98535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rattus norvegicus (Norway rat)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     909 GATCAGATTATCATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GATCCCATCATCACCACCACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                  950 CAAGAAGAGCCAAATTGACT 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 caagaacagccararrgacr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX666494.1 GI:29291010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A98535.1 GI:6781621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 90.0
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus
```

Mon Jul 12 11:21:14 2004

à g

rge.res

```
Patent: US 5981185-A 19 09-NOV-1999;
                                                                /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     909 GATCAGATTATCATCACCACC 932
                 Location/Qualifiers
1. .24
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24 GAGGAGATTATCATTAACATCACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                        915 ATTATCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX292077.1 GI:17053760
                                                                                                                                                                                 22 ATCATCATCACCACC 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 5.5
Best Local Similarity 79.2
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                          unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SAM
                                   source
                                                                                                                                                                                                                                  RESULT 12
A71628/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX292077/c
    JOURNAL
                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                         ð
                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                         ;
0
                                                                                                                                                                                                                                                                PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 01-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OST Rattus norwegicus (rat)

PN JP 2001515011-A/10

PD 18-25EP-2001

PF 02-SEP-1997 GB 9718487.3

PI IMOTHY HIGENBOTTAM, KEITH MCCORMACK, ADRIAN SMITH PC
AG1K31/708, AG1M1/00, AG1M15/00, AG1P3/06, C12N15/09, C12N15/00 CC
C Topology: Linear;
CC Antisense remedy of pulmonary hypertension
FH Key

Location/Qualifiers
FT source

/organism='Rattus norvegicus (rat)'.
                                                                                                                                                                                                                                                                                                                     JP 2001515011-A/10.
Rattus norvegicus (Norway rat)
Rattus norvegicus (Nordata; Caniata; Vertebrata; Euteleostomi;
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
Unclassified.
1 (bases 1 tc 24)
Matson,R.S., Coassin,P.J., Rampal,J.B. and Caskey,C.Thomas.
Oligonuclectide repeat arrays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism='Rattus norvegicus (rat)'. Location/Qualifiers
                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                           DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                      Antisense remedy of pulmonary hypertension.
                                                                                                                                                                                                                                                                                                                                                                                                   Rattus.

1 (bases 1 to 20)
Higenbottam, T., Mccormack, K. and Smith, A.
Antisense remedy of pulmonary hypertension
Patent: JP 2001515011-A 10 18-SEP-2001;
UNIVERSITY OF SHEFFIELD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                            /organism="Rattus norvegicus"
/mol_type="unassigned DNA"
/db_xref="taxon:10116"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Rattus norvegicus"
/mol_type="genomic DNA"
/db_xref="taxon:10116"
                                                                                         Score 16.4; DJ
Pred. No. 75;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19 from patent US 5981185. AR084530 AR084530.1 GI:10011301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5.7%; Score 16.4; I 94.4%; Pred. No. 75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
 Location/Qualifiers
                                                                                                                                                      903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   886 TGCACTTACTTCTCAGCT 903
                                                                                                                                                                                 1 recacricerrereager 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 TGCACTTCCTTCTCAGCT 18
                                                                                                                                                                                                                                                                                                      BD080757.1 GI:22626350
                                                                                        Query Match 5.7%;
Best Local Similarity 94.4%;
Matches 17; Conservative
                                                                                                                                                     886 TGCACTTACTTCTCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown,
                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
AR084530/c
                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                              RESULT 10
BD080757
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
```

```
Barany, F., Zirvi, M., Gerry, N.P., Favis, R. and Kliman, R. Method of designing addressable array for detection of nucleic acid sequence differences using ligase detection reaction Patent: WO 0179548-A 3839 25-0CT-2001, CORNELL RESEARCH FOUNDATION, INC. (US)
                                                  ö
                                                                                                                                                                                                                                                              PAT 07-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 21-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 24)
Sela-Buurlage, M. B., Melchers, L. S., Stuiver, M. H., Lageweg, W.,
Custers, J. H., Ponstein, A. S. and Van, D. J.
ANTIFUNGAL PROTEINS, DNA CODING THEREFORB, AND HOSTS INCORPORATING
                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                     ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .,
       Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.5%; Score 16; DB 1; Length 24; 79.2%; Pred. No. 1.18+02; Live 0; Mismatches 5; Indels
                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="Hypothetical Probe Sequence"
                                                1;
Query Match 5.7%; Score 16.4; DB 1; Best Local Similarity 94.4%; Pred. No. 95; Matches 17; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5.5%; Score 16; DB 1; I 79.2%; Pred. No. 1.1e+02; tive 0; Mismatches 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3839 from Patent WO0179548. AX292077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent: WO 9813478-A 61 02-APR-1998;
SELA BUURLAGE MARIANNE BEATRIX (IL)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                       A71628 24 bp
Sequence 61 from Patent WO9813478.
A71628 A71628.1 GI:4775247
```

ó,

Gaps

0;

PAT 11-MAY-2001

linear

```
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                               Picoult-Newburg,L. and Pohl,M. Genotyping reagents, kits and methods of use thereof Patent: WO 0129262-A 3214 26-APR-2001; Orchid BioSciences, Inc. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5.3%; Score 15.4; DB 1; Length 17; 94.1%; Pred. No. 96;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
5.4%; Score 15.6; DB 1; Length 24;
Best Local Similarity 81.8%; Pred. No. 1.4e+02;
Matches 18; Conservative 0; Mismatches 4; Indels
                                                   Score 15.8; DB 1; Length 22; Pred. No. 1.1e+02; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/nofe="primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human posh-like protein 1
Patent: EP 1239051-A 1116 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp Di
Sequence 1116 from Patent EP1239051.
AX531607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                   AX118091 24 bp D
Sequence 3214 from Patent WO0129262.
AX118091
/mol_type="unassigned DNA"
/db_xref="taxon:5476"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            725 ACTCTGGTCATAGGACTTGGTA 746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 ACTCTGGTCTTGGGACATGTTA 23
                                                                                                                                     821 TIGGCIGIGICICITITCI 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    744 GIAGGICCCAGGGICC 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX531607.1 GI:25255004
                                                                                                                                                             1 draddedecedadderec 17
                                                                                                                                                                                                                                                                                                                          AX118091.1 GI:14035042
                                                                                                                                                                                                                                                                                                                                                              synthetic construct
synthetic construct
artificial sequences.
                                                         5.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 94.1
Matches 16; Conservative
                                                            Query Match
Best Local Similarity 89.5
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l
Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                            AX118091
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX531607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PEATURES
                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                           a
                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PP 27-FEB-2001
PR 04-SEP-1997 JP 1998515200
PR MAARTEN HENDRIK STUIVER,
PI JEROME HUBERTUS HENRICUS VICTOR CUSTERS,
PI JEROME HUBERTUS HENRICUS VICTOR CUSTERS,
PI JARIANNE BEATRIX SELA BUURLAGE, LEO SJOERD MELCHERS, PI JOHANNA PIETERNBELA ELS VAN DEVENTER TROOST, WESSEL LAGEWEG, PI JOHANNA PIETERNBELA ELS VAN DEVENTER TROOST, WESSEL LAGEWEG, PI ANNE SILENE PONSTEIN
PC CI2N15/82, C12N9/102, C12Q1/68, C07K16/40, C12N15/62, A01H5/00 CC Strandedness: Single;
CC Topology: Linear;
FH Key I. -24
FT source //organism='Unidentified'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 16-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                         BD008613 24 bp DNA linear PAT 31-JAN-2002
Antifungal proteins, DNA coding therefor, and hosts incorporating
                                                                                                                                                                                                                                                                                                                  unclassified.
I (bases 1 to 24)
Stuiver, M.H., Custers, J.H.H.V., Buurlage, M.B.S., Melchers, L.S.,
Deventer, J.P.E.V., Lageweg, M. and Ponstein, A.S.
Davanter, J.P.E.V., Lageweg, M. and Ponstein, A.S.
Partifungal proteins, DNA coding therefor, and hosts incorporating
Patent: JP 2001502525A 51 27-FEB-2001;
MOGEN INTERNATIONAL NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes; Saccharomycetales; Candida.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Roemer, T., Jiang, B., Boone, C., Bussey, H. and Ohlsen, K.L. Gene disruption methodologies for drug target discovery Patent: WO 02053782-A 4849 11-JUL-2002; Blitra Pharmaceuticals, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 79.2%; Pred. No. 1.1e+02;
Matches 19; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 4849 from Patent W002053728. AX487549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Candida albicans"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .24
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="genomic DNA"
/db xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                909 GAICAGATTATCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unidentified
JP 2001502525-A/51
27-FEB-2001
04-SEP-1997 JP 1998515200
                               737 GGACTTGGTAGGGTCCCAGGGTCC 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24 GAGGAGATTATCATTAACATCACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                24 GGTCTTCGTTGCGTCCCAAGGTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX487549.1 GI:22321697
                                                                                                                                                                                                                        BD008613
BD008613.1 GI:18636986
JP 2001502525-A/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Candida albicans
Candida albicans
                                                                                                                                                                                                                                                                               unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                    OS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX487549/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                               RESULT 14
BD008613/c
                                                                                                                                                                     LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 15
                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PEATURES
                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

PAT 22-NOV-2002

linear

; 0

Gaps

.

ö

Gaps

.

Indels

```
٣
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 cáccorcocacion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      728 CTGGTCATAGGACTTGG
                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.
                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR315394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                             XIANG,
                                                                                                                                                                                                                                                                                                                                                 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR315394/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 22
AX293310
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                 PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 08-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 18-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Koester, H., Little, D.P., Braun, A., Jurinke, C., van den Boom, D., Kiang, G., Lough, D.M., Ruppert, A. and Hillenkamp, F. Dna diagnostics based on mass spectrometry
Patent: EP 1164203-A 102 19-DEC-2001;
                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                     high density
                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD132170
BD132170.1 GI:23227115
JP 2002507883-A/102.
Synthetic construct
synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 19)
Koster, H., Little, D.P., Braun, A., Lough, D.M., Xiang, G.,
                                                                                                                                                                                                                                                                      5.3%; Score 15.4; DB 1; Length 19; 94.1%; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.3%; Score 15.4; DB 1; Length 19; 94.1%; Pred. No. 1.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD132170 19 bp DNA line:
DNA diagnosis method based on mass spectrometry.
                                                                                                                                  1 (bases 1 to 19)
Cohen, D., Chumakov, I. and Blumenfeld, M.
Biallelic markers for use in constructing a disequilibrium map of the human genome Patent: US 6537751-A 6172 25-MAR-2003;
Location/Qualifiers
                            Sequence 6172 from patent US 6537751.
AR294437
                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     19 bp 1
AX328605
AX328605 AX328605.1 GI:18101804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .19
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                     1. .19
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENOM, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                         873 CACTITCCTGAGAIGCA 889
                                                                   AR294437.1 GI:31681721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                17 CACTICCCIGAGAIGCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGGGTCCCCAGGCCTC 3
                                                                                                                                                                                                                                                                                                 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16; Conservative
                                                                                                                        Unclassified.
                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unidentified
unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                            Unknown.
                                                                                                            Unknown
RESULT 18
AR294437/c
LOCUS
                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 19
AX328605/c
                                       DEFINITION
                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                AUTHORS
TITLE
                                                      ACCESSION
                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 20
BD132170/c
                                                                                                                                  REFERENCE
                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
SOURCE
                                                                  VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DP
```

```
HUBERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 20)
Griffais, R., Hoiseth, S.K., Zagursky, R.J., Metcalf, B.J., Peek, J.A.,
Sankaran, B. and Fletcher, L.D.
Chlamydia pneumoniae polynucleotides and uses thereof
Patent: US 6559294-A 5931 06-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 21-NOV-2001
                                                                                                                                                                                                                                                            GUOBING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                       PN 12-MAR-2002
PD 12-MAR-2002
PP 06-NOV-1997 JP 1998521832
PF 06-NOV-1996 US 08/744481,06-NOV-1996 US 08/744503
06-NOV-1996 US 08/7446055,06-NOV-1996 US 08/744509 PR 23-JAN-1997 US 08/744505 US 08/745059 PR 19-SEP-1997 US 08/93792,08-OCT-1997 US 08/947801 PI CONTER, DANIEL P LITTLE, ANDREAS BRAUN, DAVID M LOUGH, PI GU
                                                                                                                                                                                                                                                                                       PI DIRK VAN DEN BOOM,CHRISTIAN JURINKE,ANDREAS RUPERT PC C12Q1/68,C07H21/00,C07F9/24 CC Strandedness: Single; CC Topology: Unknown; Location/Oualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.3%; Score 15.4; DB 1; Length 19; 94.1%; Pred. No. 1.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
Boom,D.V.D., Jurinke,C. and Rupert,A.
DNA diagnosis method based on mass spectrometry
Patent: JP 2002507883-A 102 12-MAR-2002;
SEQUENOM INC
                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                         1 .19
/organism="synthetic construct"
/wol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.3%; Score 15.4; DB 1; 94.1%; Pred. No. 1.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 bp DNI
US 6559294.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20 bp DN Sequence 5072 from Patent W00179548.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR315394
Sequence 5931 from patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR315394.1 GI:31708820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX293310.1 GI:17054993
```

```
BD137914
                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                          source
                                           TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                               RESULT 25
AR200639
                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 26
BD137914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                  REFERENCE
                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                           à
                                                                                                                                                                                                                                     염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
Barany, F., Zirvi, M., Gerry, N. P., Favis, R. and Kliman, R.
Method of designing addressable array for detection of nucleic acid
sequence differences using ligase detection reaction
Patent: WO 0179548-A 5072 25-0CT-2001;
CORNELL RESPARCH FOUNDAIDON, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                       PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 БС
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Artificial Sequence
JP 2001321190-A/2104
20-NOV-2001
12-MAR-2001 JP 2001068285
BIICHI SOEDA
C12N15/09,C12N15/09,C12M1/00,C12Q1/68,G01N33/53,G01N33/566,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A method of arraying genome clone
Patent: JP 2001321190-A 2104 20-NOV-2001;
THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH, YUGENKAISHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Description of Artificial Sequence:Synthetic DNA FH Location/Qualifiers
                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                          5.2%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 1.3e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'organism='Artificial Seguence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                   1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:33630"
/note="Hypothetical Probe Sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 5.2%; Score 15.2; DB 1; Best Local Similarity 85.0%; Pred. No. 1.3e+02; Matches 17; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. 20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="teaxon:32630"
                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21 bp Di
Sequence 401 from patent US 5851760.
AR067053
                                                                                                                                                                                                                                                                                                                                    BD089860 20 bp
A method of arraying genome clone.
BD089860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                    705 CAGCGAGTCCCAGGAGAGTG 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                869 GGAACACTITCCTGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CAGCGAGTCCATGGACAGTG 20
                                                                                                                                                                                                                                                                                                                                                                            BD089860.1 GI:22635470
JP 2001321190-A/2104.
Synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GI:5998275
                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C12N15/00
                                                                                                                                                                    Query Match
Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR067053.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENOTECHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Soeda, E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OS
PN
PD
PD
PC
PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            200
                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                        RESULT 23
BD089860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
 AUTHORS
                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR067053
LOCUS
                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
```

```
1 (bases 1 to 21)
Beck,J.Joseph.
Detection of wheat and barley fungal pathogens using the polymerase chain reaction
Patent: US 6358680-A 28 19-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Detection of wheat and barley fungal pathogens using the polymerase chain reaction
Ratent: JP 2002504347-A 28 12-FEB-2002;
NOVARTIS AG
OS Artificial Sequence
PD 12-REB-2002
PF 18-FEB-1999 JP 2000532549
PF 20-FEB-1999 US 09/026601
PT JAMES JOSEPH BECK
PC 012N15/09, C12Q1/68, C12N15/00
CC Description of Artificial Sequence: primer JB676 FH Key
                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD137914 21 18-SEP-2002 Detection of wheat and barley fungal pathogens using the polymerase
Unclassified.

1 (bases 1 to 21)

Evans, G.A. and Smith, M.W.

Method for generation of sequence sampled maps of complex genomes
Patent: US 5851760-A 401 22-DEC-1998;

Location/Qualifiers
                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                  Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.2%; Score 15.2; DB 1; Length 2
85.0%; Pred. No. 1.4e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                             5.2%; Score 15.2; DB 1; 185.0%; Pred. No. 1.4e+02; 1ive 0; Mismatches 3;
                                                                                                                             1. .21
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 28 from patent US 6358680.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .21
/organism="unknown"
                                                                                                                                                                                                                                                                                               959 CCAAATTGACTCTCTAAATC 978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      707 GCGAGTCCCAGGAGAGTGAC 726
                                                                                                                                                                                                                                                                                                                                      1 cccaarrercrecraaare 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 GCGAGTCTCGGGAGAGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR200639.1 GI:20251527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD137914.1 GI:23232859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   artificial sequences.
1 (bases 1 to 21)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JP 2002504347-A/28.
                                                                                                                                                                                                         Query Match 5.2°
Best Local Similarity 85.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              chain reaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Beck, J.J.
```

à

```
mammal
              Key
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  methods
              표보보
                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                              LOCUS
DEFINITION
                                                                                                                                                                                                                                                                   RESULT 29
AX643093/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD183181/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BDU80020 23 bp DNA linear PAT 27-AUG-2002 Mutation in myostatin gene causing double-musculation in mammal. BD080020
                                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·,
                                                                                                                                                                                                                                                                                  PAT 14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PF 14-JUL-1998 JP 2000502165
PR 14-JUL-1997 US 08/891789, IS-JAN-1998 US 09/007761 PI LUC GROBET, MICHEL GEORGES, DOMINIQUE PONCELET PC ADIK67/027, AGIK31/7088, AGIK39/00, AGIK48/00, AGIP21/00, CO7K14/PC C12N15/09, C12Q1/68, C12N5/00, C12N15/00 CC Strandedness: Single;
CC TOpology: Linear:
CC Mutation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unidentified
unclassified.
1 (bases 1 to 23)
Grobet, L., Georges, M. and Poncelet, D.
Mutation in myostatin gene causing double-musculation in mammal
Patent: JP 2001509378-A 9 24-JUL-2001;
UNIVERSITY OF LIEGE
ON Unidentified
PN JP 2001509378-A/9
PD 24-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Topology: Linear; Mutation in myostatin gene causing double-musculation in
                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                          organism='Artificial Sequence'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.2%; Score 15.2; DB 1; Length 23; 85.0%; Pred. No. 1.56+02; tive 0; Mismatches 3; Indels
                                                                                                                          5.2%; Score 15.2; DB 1; Length 21;
85.0%; Pred. No. 1.4e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                  linear

    .21
    forganism="synthetic construct"
|mol type="genomic DNA"
|db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 23)
Grobet, L. and Georges, M.
Double-muscling in mammals
Patent: US 6103466-A 13 15-AUG-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                            Sequence 13 from patent US 6103466.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840 TCTCTGAAGACAGCGTCCTG 859
                                                                                                                                                                                  707 GCGAGTCCCAGGAGAGTGAC 726
Location/Qualifiers
                                                                                                                                                                                                       GCGAGTCTCGGGAGAGAGAC 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 reacreaagaaacerecre 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BD080020.1 GI:22625623
JP 2001509378-A/9.
                                                                                                                                                                                                                                                                                                                          AR105873.1 GI:12819938
                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 17; Conserv
              source
                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                      17;
              FT
                                                                                                                                                                                                           7
                                                                                                                            Query Match
                                                         source
                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                        RESULT 27
                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                  AR105873
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD080020
                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                        SOURCE
```

ð g

```
Nucleic acid, nucleic acid for the detection of dechlorinating bacteria, prove, method for the detection of dechlorinating bacteria and method for the detection of dechlorinating BDIS181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 24-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JP 2002345473-A/30.

Synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 20)
Nucleic acid, nucleic acid for the detection of dechlorinating
bacteria, prove, method for the detection of dechlorinating
bacteria and method for dechlorination
bacteria and method for Second S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nakamura, K. and Ueno, T. Method for Method for Method for detecting detecting describing treating earth or underground water polluted by chlorinated ethylene or chlorinated ethane, and nucleic acids used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 5.2%; Score 15.2; DB 1; Length 23; Best Local Similarity 85.0%; Pred. No. 1.5e+02; Matches 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                     . .23
organism='Unidentified'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 5.2%; Score 15; DB 1; Le Best Local Similarity 100.0%; Pred. No. 1.4e+02; Matches 15; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1...20
/organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent: BP 1266969-A 30 18-DEC-2002;
Kurita Water Industries Ltd. (JP)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX643093 20 bp
Sequence 30 from Patent EP1266969.
AX643093
                                                                                                                                                                                              1. .23
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840 TCTCTGAAGACAGCGTCCTG 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 TCACTGAAGAAAACGTCCTG 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX643093.1 GI:28550250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD183181.1 GI:31875381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 916 TTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 TTATCATCACCACCA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
```

```
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                      Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                         Unknown.
                                                                                                18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 39
AX637816/c
LOCUS
                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                    RESULT 37
AR059170/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 38
AR059172/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                  JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                          ð
                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.
1 (bases 1 to 18)
Sullivan, S., Draper, K., Kisich, K., Stinchcomb, D.T. and McSwiggen, J.
TNF-.alpha. ribozymes
Patent: US 5911300-A 1152 22-SEP-1998;
Location/Qualifiers
                                                                                                                       1 (bases 1 to 18)
Sullivan, S., Draper, K., Kisich, K., Stinchcomb, D.T. and McSwiggen, J.
TNF-.alpha. ribozymes
Patent: US 5811300-A 7 22-SEP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 18)
Sullivan, S., Draper, K., Kisich, K., Stinchcomb, D.T. and McSwiggen, J.
TNF-.alpha. ribozymes
Patent: US 5811300-A 9 22-SEP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                             PAT 29-SEP-1999
                        PAT 29-SEP-1999
                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5.1%; Score 14.8; DB 1; Length 18; 88.9%; Pred. No. 1.4e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                     5.1%; Score 14.8; DB 1; Length 18; 88.9%; Pred. No. 1.4e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                            linear
                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18 bp DNA
US 5811300.
                                                                                                                                                                                                                                                                                                                                                                             DNA
                          DNA
                                                                                                                                                                                                            /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                       18 bp
Sequence 9 from patent US 5811300.
AR041219
AR041219.1 GI:5961715
                    Sequence 7 from patent US 5811300.
AR041217
AR041217.1 GI:5961713
                                                                                                                                                                                   1. .18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR042362
Sequence 1152 from patent
AR042362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          840 TCTCTGAAGACAGCGTCC 857
                                                                                                                                                                                                                                                                                       840 TCTCTGAAGACAGCGTCC 857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18 TGTCTGAAGACAGCTTCC 1
                                                                                                                                                                                                                                                                                                                18 TGTCTGAAGACAGCTTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR042362.1 GI:5962858
                                                                                                                                                                                                                                      Query Match
Best Local Similarity 88.99
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .18
                                                                                                  Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR042362/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
 RESULT 34
AR041217/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                   RESULT 35
AR041219/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                ACCESSION
VERSION
KEYWORDS
                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                              JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 36
                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                         ð
```

```
PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 21-FEB-2003
                                     ö
                                                                                                                                                                                                           PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                       Gaps
                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
Score 14.8; DB 1; Length 18;
Pred. No. 1.4e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 5.1%; Score 14.8; DB 1; Length 18; Best Local Similarity 88.9%; Pred. No. 1.4e+02; Matches 16; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match 5.1%; Score 14.8; DB 1; Best Local Similarity 88.9%; Pred. No. 1.4e+02; Matches 16; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RNA
                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hairpin ribozymes
Patent: US 5837855-A 27 17-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX637816 18 bp Rb
Sequence 4955 from Patent EP1260586.
AX637816.1 GI:28473430
                                                                                                                                                                                                                                                                                                                                                        Chowira, B. and McSwiggen, J.
Hairpin ribozymes
Patent: US 5837855-A 25 17-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .18
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                       AR059170 18 bp 1
Sequence 25 from patent US 5837855.
AR059170.1 GI:5984747

    .18
    /organism="unknown"
    /mol_type="unassigned DNA"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR059172 18 bp 18
Sequence 27 from patent US 5837855.
AR059172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 18)
Chowrira, B. and McSwiggen, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840 TCTCTGAAGACAGCGTCC 857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840 TCTCTGAAGACAGCGTCC 857
                                                                          840 TCTCTGAAGACAGCGTCC 857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18 rercreaseacaecrice 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 rerergaagacagerree 1
                                                                                                               rerereaseacacerree 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR059172.1 GI:5984749
 Query Match
Best Local Similarity 88.9%;
Matches 16; Conservative
```

Page 17

```
8. .16
/note="DNA-oligonucleotides"
               /mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          909 GATCAGATTATCATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GATCCCATCACCATCACCATCAC 23
                                                                                          /mod base=OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD094663.1 GI:22640251
WO 0138517-A/5.
                                                                                                                                                                                                                                                                                                                      805 CTCCTCCAACTCAGG 819
                                                                                                                                                                                                                                                                                                                                        Synthetic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 78.3
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                   modified base
                                                                                                                                                                               modified_base
                                                                                                   misc_feature
                                                                                                                              misc_feature
                                                                                                                                                                                                                                  misc_feature
                                                                                                                                                       misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                        RESULT 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                  BD094663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D
D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                              PAT 25-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Klippel-Giese, A., Kaufmann, J. and Giese, K. Compounds and methods for the identification and/or validation of a
          03-DEC-2002

18-MAY-2001 JP 2001149915

KANJI NAKAMURA, TOSHIHIRO UENO

CIZNIS/09, B09C1/10, C02F3/00, C02F3/34, C12N1/00, C12N1/20, C12Q1/

B09B3/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 08-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 23)
Borowsky, B.E., Ogozalek, K.L., Lakhlani, P.P. and Adham, N.
Methods of screening for compounds which bind to a human SNORF36A
                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                           ce 1..20 /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                   Score 15; DB 1; Length 20;
Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 5.2%; Score 15; DB 1; Length 23; Best Local Similarity 78.3%; Pred. No. 1.7e+02; Matches 18; Conservative 0; Mismatches 5; Indels
                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                   1. .20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RNA
                                                                                                                                                                                                                  ch 5.2%; Score 15; DB 1 Similarity 100.0%; Pred. No. 1.4 15; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                       Sequence 22 from patent US 6413731. AR217117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent: US 6413731-A 22 02-JUL-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         target
Patent: EP 1325955-A 15 09-JUL-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX797912 23 bp
Sequence 15 from Patent EP1325955.
AX797912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        842 TCTGAAGACAGCGTCCTGGCTCC 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         atugen AG (DE)
Location/Qualifiers
1. .23
JP 2002345473-A/30
                                                                                                                                                                                                                                                                                                                                                                                              AR217117.1 GI:23316502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX797912.1 GI:37604237
                                                                                                                                                                                                                                                                  916 TTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                  17 TTATCATCACCACCA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                               source
                                                                                     primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    receptor
                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 32
AX797912/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                RESULT 31
AR217117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ä
```

```
    .7
/note="2'-O-methylated RNA-oligonucleotides phosphodiester
internucleoti de-linked"

                                                                                                                                                                                                                                                                                17. .23
into="2'-O-methylated RNA-oligonucleotides phosphodiester
internucleoti de-linked"
/mod_base=OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HU094663 27-AUG-2002
Fusion gene expressing a protein capable of capturing a metal.
BD094663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Artificial Sequence
W0 0138517-A/5
31-MAY-2001
26-OCT-2000 W0 2000JP007518
19-NOV-1999 JP 99P 330226
ATSUD TANAKA, MITSUYOSHI UEDA
C12N15/10,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C02F1/20,C02F1/
B01D53/64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 23)
Tanaka,A. and Ueda,M.
Fusion gene expressing a protein capable of capturing a metal
Patent: WO 0138517-A 5 31-MAY-2001;
TOYOTA JIDOSHA KK,AISUO TANAKA,MITSUYOSHI UEDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps

    17
/note="phosphorothioate-internucleotide linked"

                                                                                                                                                     'note="covalently linked to an inverted abasic"
                                                                                                                                                                                                                                                                                                                                                                                                        /note="covalently linked to an inverted abasic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
/note="antisense oligonucleotide rPTEN694L23"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ce 1.23
/organism='Artificial Sequence'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 5.2%; Score 15; DB 1; Length 23; Best Local Similarity 100.0%; Pred. No. 1.7e+02; Matches 15; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5.2%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 1.7e+02; tive 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .23
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
```

rge.res

```
09/140580
                                                                                                                                                                                                                                                                                                                                          ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-AUG-1999 JP 2000567550
27-AUG-1998 US 09/1405
                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                  Streptococcus pneumoniae
Streptococcus pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            940 GAATTTTACGCAAGAAGA 957
                                                                                                                                                                                                                               825 CTGTGTCTCTTTCTTCT 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                 CTTTGTCTCTTCTCT 20
                                                                                                                                                                                                                                                                                                                                                                                     BD248423.1 GI:33058193
JP 2002524055-A/2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HOWARD KALLENDER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3 GAAAATTACGCAAGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Streptococcus.
1 (bases 1 to 20)
Kallender, H.
                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C12N5/10,
                                                                                                                                                                                                                                                                                                                                          BD248423
                                                                                                                                                                                                                                                                                                                                                                     BD248423
                                                                                                                                                                                                 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PP
PF
PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \mathbf{PC}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FERCERE
                                                                                                                                                                     Query Match
                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          43
AUTHORS
                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                           RESULT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR225992
                                                                                                                                                                                                                                                                                                                        BD248423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         日
                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 26-JAN-2000
                                                                                                                                        Woolf, \Gamma_{\rm c}
                                                                                                                                                                                                                                                                                                                                          ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 21-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryogical Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Eutheria, Primates, Catarrhini, Hominidae, Homo.
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
Kahn,A. and Chelly,J.
A gene called XLIS and the XLIS gene product, called doublecortin and their applications
Patent: Ep 0918091-A 66 26-MAY-1999;
INST NAT SANTE RECH MED (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 20)
                                                                           Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpelsky, A., Draper, K.G., Kiskich, K., Matulic-Adamic, J., Modwiggen, J.A., Modwk, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.B. and
                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .,
                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                         Ouery Match 5.1%; Score 14.8; DB 1; Length 18; Best Local Similarity 88.9%; Pred. No. 1.46+02; Matches 16; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 14.8; DB 1; Length 20;
Pred. No. 1.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                       genes
Patent: EP 1260586-A 4955 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .20
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                              /mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20 bp
Sequence 66 from Patent WO9927089.
A95393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A81014 20 bp
Sequence 66 from Patent EP0918091.
                                                                                                                                                                                                                                   1. .18
/organism="unidentified"
                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        825 CTGTGTCTCTTTTCTTCT 842
                                                                                                                                                                                                                                                                                                                                                                          840 TCTCTGAAGACAGCGTCC 857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 cririgicicricrici 20
                                                                                                                                                                                                                                                                                                                                                                                                     rerergadadacagerree 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GI:6779437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A81014.1 GI:6731587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                unclassified.
                unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A95393.1
                                                                                                                                                                                                                                                                                                                                                                                                       18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A81014
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                ORGANISM
                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 41
A95393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
;
0
                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C_CLORDI/19, CL2NI/21, PC
CLORDI/02, CL2QI/68, GOIN33/15, GOIN33/50, GOIN33/53, GOIN33/53, P.
GOIN33/531,
GOIN33/56, GOIN33/58, GOIN33/68, GOIN37/00, GOIN37/00, CL2NI5/00, A6IK37/02, CL2NS/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PC
Francis, F. and Kahn, A.
A GENE CALLED XLIS AND THE XLIS GENE PRODUCT, CALLED DOUBLECORTIN
AND THEIR PREPARATIONS
PALENT: WO 9927089-A 66 03-JUN-1999;
INST NAT SANTE RECH MED (FR); FRANCIS FIONA (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C12N15/09, A61K31/711, A61K38/00, A61K39/395, A61K39/395, A61K45/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A61P31/04,
PC A61P35/00,C07K14/315,C07K16/12,C12N1/15,C12N1/19,C12N1/21,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ce 1.20 /organism='Streptococcus pneumoniae'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bactēria; Firmīcutes; Lactobacillales; Streptococcaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                          5.1%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 1.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 5.1%; Score 14.8; DB 1; Length 20; Best Local Similarity 88.9%; Pred. No. 1.5e+02; Matches 16; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear

    .20
forganism="Streptococcus pneumoniae"
/mol_type="genomic DNA"
/db_xref="taxon:1313"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent: JP 2002524055-A 2 06-AUG-2002; SMITHKLINE BEEGHAM CORP OS Streptococcus pneumoniae PN JP 2002524055-A/2 PD 06-AUG-2002
                                                                                                                                                1. .20
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
```

```
INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH, YUGENKAISHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 88.99
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 (bases 1 to 20)
Horii, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 88.9
Matches 16; Conservative
                                                                                                                           C12N15/00
                                                                                                                                                                     source
                                                                                                              C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AB068887.1
               GENOTECHS
OS Artif
PN JP 20
PD 20-NC
PF 12-MA
PI EIICH
PC C12N1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AB068887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11374902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc_feature
                                                                                                                           S 25
                                                                                                                                                                   FT
                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 46
AB068887/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sonrce
                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                 ..
0
  PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                        PAT 30-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ashkenazi, A.J., Goddard, A., Godowski, P.J., Gurney, A.L.,
Hillan, K.J., Marsters, S.A., Pan, J., Pitti, R.M., Roy, M.A., Smith, V.,
Stone, D.M., Watanabe, C.K. and Wood, W.I.
Compositions and methods for the treatment of tumour
Better: WO 0153486-A 214 26-JUL-2001;
Genentech, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 27-AUG-2002
                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 5.1%; Score 14.8; DB 1; Length 20; Best Local Similarity 88.9%; Pred. No. 1.5e+02; Matches 16; Conservative 0; Mismatches 2; Indels
 linear
                                                                                                                                                                                                                                                               2; Indels
                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.20 'organism="synthetic construct"
|/mol_bree="unassigned DNA"
|/mol_bree="taxon:32630"
|/note="Synthetic Oligonucleotide Probe."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                      M Unknown.
Unclassified.
E 1 (bases 1 to 20)

Myatt, J. and Freier, S.M.
Antinsense modulation of Her-1 expression
Antinsense modulation of Her-1 expression
Location/Qualifiers

20 "...known" "...known"
                                                                                                                                                                                                                                    5.1%; Score 14.8; DB 1; 88.9%; Pred. No. 1.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Soeda, E. A method of arraying genome clone Patent: JP 2001321190-A 1794 20-NOV-2001;
 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                 20 bp 1
Sequence 214 from Patent W00153486.
AX201535
           Sequence 55 from patent US 6444465.
AR225992
AR225992.1 GI:27264146
                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                bp
clone.
 20 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A method of arraying genome
BD089550
BD089550.1 GI:22635160
JP 2001321190-A/1794.
                                                                                                                                                                                                                                                                                        895 TTCTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 777
                                                                                                                                                                                                                                                                                                         AX201535.1 GI:15391372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CCTTGGCCTCCATTTCTG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                760 CCTAGGCCTCCACTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                 Query Match
Best Local Similarity
AR225992
                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD089550
                                                                                                                                                                                                                                                             16;
                                                                SOURCE
ORGANISM
                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 45
BD089550/c
            DEFINITION
                                                                                                                     AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                          RESULT 44
AX201535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                      VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

```
Artificial Sequence
JP 2001321190-A/1794
20.00V-2001
12-MAR-2001
BIICHI SOEDA
C12N15/09,C12N15/09,C12M1/00,C12Q1/68,G01N33/53,G01N33/566, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABOG8887 20 bp DNA linear SYN 21-MAY-2003 Synthetic construct DNA, reverse primer for human STS sts-stSG3454 at 1936.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Inote-"reverse primer for human STS sts-stSG3454 at 1p36 sts-stSG3454 obtained from clones B6211, B93J5, B68F1, B88E8, B311M18, B109A8, B153L4, B319H19, Human BAC library RPCI-11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Chen,Y.Z., Hayashi,Y., Wu,J.G., Takaoka,E., Maekawa,K., Watanabe,N., Inazawa,J., Hosoda,F., Arai,Y., Mizushima,H., Morohashi,A., Ohira,M., Nakagawara,A., Liu,S., Hoshi,M., Horii,A. and Soeda,E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Direct Submission
Submitted (04-AUG-2001) Akira Horii, Tohoku University School of
Medicine, Molecular Pathology; 2-1 Seiryomachi, Aoba-ku, Sendai,
Miyagi 980-8575, Japan (E-mail:horii@mail.cc.tohoku.ac.jp,
Tel:81-22-717-8042, Fax:81-22-717-8047)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A BAC-based STS-content map spanning a 35-Mb region of human
                                                                                                                                                                                               띮
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                          Description of Artificial Sequence:Synthetic DNA Location/Qualifiers
                                                                                                                                                                                                                                                                'organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                           5.1%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 1.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 14.8; DB 1;
Pred. No. 1.5e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                            /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    chromosome 1p35-p36
Genomics 74 (1), 55-70 (2001)
                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                          1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    778 AGGCCAGCCCTCTGGTG 795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         778 AGGGCAGCCCCTCTGGTG 795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GI:15129691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19 AGGGCAGCCTCTCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
Location/Qualifiers
                                                                                                                                                                                                               828 TGTCTCTTTTCTCTGAAG 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              829 GICTUTTTTTTTTGAAGA 849
                                                                                                                                                                                                                                 21 GGCTCTGGTCTGCTCTGAAGA 1
                                                                                                                                                                                                                                                                                                                                             AR095884.1 GI:10024177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR095885.1 GI:10024179
    Unknown.
Unclassified.
1 (bases 1 to 21)
                                                                                                                                                                                                                                                                                                                                                                                                               (bases 1 to 21)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
1 (bases 1 to 21)
                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     sednences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sednences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                           Segev, D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                     Unknown
                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
    ORGANISM
                                                                                                                                                                                                                                                                                          AR095884/c
                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 51
AR095885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                            REFERENCE
                                                                                                                                                                                                                                                                               RESULT 50
                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                PAT 07-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 08-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 08-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Segev,D. Repair-mediated process for amplifying and detecting nucleic acid
                                                                                                                                                                                1 (bases 1 to 21)
Toulme, J. and Mishra, R.
OLIGONUCLEOTIDE RECOGNISING A NON LINEAR NUCLEIC ACID SEQUENCE,
THERAPEUTIC APPLICATIONS THEREOF AND METHOD FOR PREPARING SAME
PATENT: WO 9604374-A 9 15-FEB-1996,
INST NAT SAMTE RECH MED (FR)
Other publication FR 2723371 960209.
                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                  .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                      Query Match 5.0%; Score 14.6; DB 1; Length 21; Best Local Similarity 81.0%; Pred. No. 1.8e+02; Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 5.0%; Score 14.6; DB 1; Length 21; Best Local Similarity 81.0%; Pred. No. 1.8e+02; Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                       1. .21
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .21
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         mcg-
sequences
Patent: US 6004826-A 5 21-DEC-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 5 from patent US 6004826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 6 from patent US 6004826.
AR095881
                                                                            21 bp Sequence 9 from Patent WO9604374.
                                                                                                                                                                                                                                                                                                                                                                                                        712 TCCCAGGAGAGTGACTCTGGT 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         829 GTCTCTTTTCTTCTGAAGA 849
                                                                                                                                                                                                                                                                                                                                                                                                                           1 TCCCAGGAGTGTCAATCGGGT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCTCTGGTCTGCTCTGAAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR095880.1 GI:10024169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR095881.1 GI:10024171
AGGCAGCCTCTCTGATG 2
                                                                                                                  A48997.1 GI:2302608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 21)
                                                                                                                                          unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown
             19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                        DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 48
AR095880/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                  RESULT 47
A48997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR095881
LOCUS
                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                  VERSION
                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
```

```
.;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 08-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 08-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·:
Segev, \mathbb{D}_{\cdot} . Repair-mediated process for amplifying and detecting nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Repair-mediated process for amplifying and detecting nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Segev, \mathbf{D}_{\cdot} . Repair-mediated process for amplifying and detecting nucleic acid
                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                               ٠.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                             Query Match 5.0%; Score 14.6; DB 1; Length 21; Best Local Similarity 81.0%; Pred. No. 1.8e+02; Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
5.0%; Score 14.6; DB 1; Length 21;
Best Local Similarity 81.0%; Pred. No. 1.8e+02;
Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 5.0%; Score 14.6; DB 1; Length 21; Best Local Similarity 81.0%; Pred. No. 1.8e+02; Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                 Actures
Sequences
Patent: US 6004826-A 6 21-DEC-1999;
Location/Qualifiers
1. 21
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 . .21
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 10 from patent US 6004826.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent: US 6004826-A 10 21-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent: US 6004826-A 9 21-DEC-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .21
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                       /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 9 from patent US 6004826.
```

ö

Gaps

. 0

21;

PAT 11-DEC-2001

ò

Gaps

. 0

PAT 14-DEC-2001

LOCUS

RESULT 52

AR298495

ACCESSION VERSION KEYWORDS

ORGANISM

SOURCE

REFERENCE AUTHORS

TITLE

JOURNAL

FEATURES

```
Stoika,R., Horwitz,G.A., Zhang,X. and Melmed,S.
Method of modulating activation of lymphocytes via modulation of
pituitary tumor transforming gene, related screeining methods
Patent: WO 0188116-A. SO 22-NOV-2001;
                                                                                                                                                                          1. .21
/organism="synthetic construct"
/mol type="unassigned DNA"
/db zref="taxon:32630"
/note="Primer used to obtain full length cDNA encoding DSP-3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Prezant, T.R., Heaney, A.P. and Melmed, S.
Treatment of neoplasia / transformation using pituitary tumor transforming gene 2
Patent: WO UND1039A 50 22-NOV-2001;
CEDARG-SINAI MED1039A. GENTER (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.0%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 1.8e+02;
ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                   4; Indels
                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                              Score 14.6; DB 1;
Pred. No. 1.8e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="synthetic construct"
/mol_type="unassigned DNA"
/mol_type="unassigned 500"
/not="Reverse primer 2-306R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                 Dsp-3 dual-specificity phosphatase
Patent: WO 0102582-A 6 11-JAN-2001;
Ceptyr, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21 bp
Sequence 50 from Patent WO0188116.
AX320114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX306401 21 bp
Sequence 50 from Patent WO0187039.
AX306401
                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                     717 GGAGAGTGACTCTGGTCATAG 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       819 GGTTGGCTGTGTCTTTTCT 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                     21 GGAGCGTGACACTGGTGATCG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      derriegererringitrier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX306401.1 GI:17645630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX320114.1 GI:17901612
                                                                                                                                                                                                                                                                                                y Match 5.0%;
Local Similarity 81.0%;
hes 17; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     artificial sequences.
              synthetic construct
synthetic construct
artificial sequences.
                                                                                    Luche, R.M. and Wei, B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S:
Matches 17
                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                  ORGANISM
                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 56
AX320114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                     REFERENCE
KEYWORDS
                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX306401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 25-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                           PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 25-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="synthetic construct"
/mol_type="unassigned DNA"
/mol_taxon:35830"
/noTe="Primer used to obtain full length cDNA encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                               Unclassified.

1 (bases 1 to 21)
Cohen,D., Chumakov,I. and Blumenfeld,M.
Biallelic markers for use in constructing a high density disequilibrium map of the human genome
Patent: US 6537751-A 10230 25-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 5.0%; Score 14.6; DB 1; Length 21; Best Local Similarity 81.0%; Pred. No. 1.8e+02; Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                            5.0%; Score 14.6; DB 1;
81.0%; Pred. No. 1.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                         AR298495 21 bp DNA Sequence 10230 from patent US 6537751.
AR298495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Luche, R.M. and Wei, B.
Dsp-3 dual-specificity phosphatase
Patent: WO 0102581-A 6 11-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 6 from Patent WO0102581.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 6 from Patent WO0102582.
                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ceptyr, Inc. (US)
   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                       /organism="unknown"
                  828 IGICICITITCITCICIGAAG 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  968 CICICIAAATCIGGIGIAIGG 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   717 GGAGAGTGACTCTGGTCATAG 737
                                        1 TGGCTCTGGTCTGCTCTGAAG 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   crearreaarcrecrerares 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGAGCGTGACACTGGTGATCG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX068100.1 GI:12578314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX068333.1 GI:12578511
                                                                                                                                                                                             AR298495.1 GI:31685779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 81.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1, ,21
                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 53
AX068100/c
```

SOURCE ORGANISM

REFERENCE

AUTHORS

JOURNAL

FEATURES

DEFINITION

LOCUS

à g ACCESSION VERSION KEYWORDS

AX068333/c

RESULT 54

ð

ACCESSION VERSION

```
Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shannon, M.
                                                                                                                                                                                                     BD274971
                                                                                                                                                                       BD274971
                                                                                                                                                                                                                                                                                                                                                                       PN CP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                    BD274971/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 60
AX531606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                                                             PAT 06-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Melmed,S.

Methods of modulating angiogenesis by regulating the expression of pituitary tumor transforming gene (pttg)

Patent: WO 0187935-A 50 22-NOV-2001;

CEDARS-SINAI MEDICAL CENTER (US)
                                                                                                                                                                                                                                                                                                                                                                                                                             Horwitz,G.A., Zhang,X., Heaney,A. and Melmed,S.
Treatment of neoplasia / transformation using pituitary tumor transforming gene carboxy terminal peptides
Patent: WO 0187934-A 50 22-NOV-2001;
CEDARS-SINAI MEDICAL CENTER (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Heaney, A.P., Ishikawa, H., Yu, R., Horwitz, G.A., Zhang, X. and
                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 21;
                                                                                                                         Length 21;
                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                    Query Match 5.0%; Score 14.6; DB 1; Best Local Similarity 81.0%; Pred. No. 1.8e+02; Matches 17; Conservative 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.0%; Score 14.6; DB 1;
ilarity 81.0%; Pred. No. 1.8e+02;
Conservative 0; Mismatches 4;
                           1. 21 / Organism="synthetic construct" / Organism="synthetic construct" / mol_type="unassigned DNA" / db xref="teaxon:32630" / note="Reverse primer 2-306R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1..21
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db xref="texon:32630"
/note="Reverse primer 2-306R"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="Reverse primer 2-306R"
                                                                                                                                                                                                                                                                                        AX352425 21 bp
Sequence 50 from Patent WO0187934.
AX352425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21 bp
Sequence 50 from Patent WO0187935.
AX419645
CEDARS-SINAI MEDICAL CENTER (US)
                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                 819 GGTIGGCIGIGICTCTTTTCT 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              819 GGTTGGCTGTGTCTTTTCT 839
                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTTGGCTGTTTTTGTTTCT 21
                                                                                                                                                                                                         1 GCTTGGCTGTTTTGTTTTCT
                                                                                                                                                                                                                                                                                                                                     AX352425.1 GI:18617693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX419645.1 GI:21524014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                  artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                   synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Thes 17; Conserve
                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 58
AX419645
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                            RESULT 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                 FEATURES
                                                                                                                                                                                                                                                                            AX352425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                          LOCUS
```

g δ

```
.
0
                                                                                                                                                                                                                          PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/123667 PI
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
    21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.0%; Score 14.6; DB 1; Length 22;
81.0%; Pred. No. 1.9e+02;
ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5.0%; Score 14.4; DB 1; Length 17; ilarity 93.8%; Pred. No. 1.5e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                          linear
                                         4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
5.0%; Score 14.6; DB 1; Length 81.0%; Pred. No. 1.8e+02; ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 22)
Shimkets, R.A.
POLYNUCLEOTIDES AND PROTEINS ENCODED THEREBY
PATENT UP 2002538786-A 35 19-NOV-2002,
Curaden Corporation, Richard A Shimkets
OS Artificial Sequence
PN UP 2002538786-A/35
PD 19-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09/520781,09-MAR-1999 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Description of Artificial Sequence: Primer
Key Location/Qualifiers.
                                                                                                                                                                                                                          BD274971 22 bp DNA 1:
POLYNUCLEOTIDES AND PROTEINS ENCODED THEREBY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sudimon, post-like protein 1
Patent: EP 1239051-A 1115 11-SEP-2002;
Acomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX531606 175 from Patent BP1239051.
Sequence 1115 from Patent BP1239051.
AX531606.1 GI:25255002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PF 09-MAR-2000 JP 2000603363
PR 08-MAR-2000 US 09/520781.
richard a shimkets
CC Description
FH Kr.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                             819 GGTTGGCTGTGTCTTTTCT 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      826 TGTGTCTCTTTTCTCTGA 846
                                                                                                                   1 Gerréécrerrirrierrirer 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21 réréréeritritriceres 1
                                                                                                                                                                                                                                                                                BD274971.1 GI:33084739
JP 2002538786-A/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Query Match
Best Local Similarity 81.0
Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
```

·.

Gaps

..

REFERENCE AUTHORS TITLE JOURNAL

FEATURES

KEYWORDS SOURCE

RESULT 61 AX531608

DP ð

```
BD228143
Antisense oligonucleotide regulation of expression of tumor necrosis factor-alpha (TNF-alpha).
BD228143.1 GI:33037913
JP 2002526125-A/346.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       00,AG1P1/16,
AG1P1/18,AG1P3/10,AG1P17/00,AG1P17/04,AG1P29/00,AG1P31/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C12N15/09, A61K31/7115, A51K31/712, A61K31/7125, A61K48/00, A61P1/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OS ARTÍFICIAL Sequence
PN JP 202526125-A/346
PD 20-AUG-2002
PF 05-OCT-1999 JP 2000574737
PR 05-OCT-1998 US 09/166186,18-MAY-1999 US 09/313932 PI
BRENDA F BAKER, FRANK C BENNETT, MADELINE M BUTLER, WILLIAM J PI
SHANAHAN JR
                                                                                                           Unclassified.

1 (bases 1 to 20)

Baker, B.F., Bennett, C.Frank., Butler, M.M. and Shanahan, W.R. Jr. Antisense oligonucleotide modulation of tumor necrosis factor-(.alpha.) (TNF-.alpha.) expression
Patent: US 6228642-A 346 08-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      artificial sequences.

1 (bases 1 to 20)

Baker,B.F., Bennett,F.C., Butler,M.M. and Jr,W.J.S.
Antisense oligomucleotide regulation of expression of tumor necrosis factor-alpha (TNF-alpha)

Patent: JP 20022561125-A 346 20-AUG-2002;

ISIS PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                organism='Artificial Sequence'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.9%; Score 14.2; DB 1; Length 20;
larity 84.2%; Pred. No. 2e+02;
Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                    3; Indels
                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 84.2%; Pred. No. 2e+02;
Matches 16; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
Sequence 346 from patent US 6228642.
ARISO270
ARISO270.1 GI:15114861
                                                                                                                                                                                                                                          1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          939 AGAATTTTACGCAAGAAGA 957
                                                                                                                                                                                                                                                                                                                                                                                        939 AGAATTTTACGCAAGAAGA 957
                                                                                                                                                                                                                                                                                                                                                                                                                          19 AGAACTTTAAGCAACAAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19 AGAACTTTAAGCAACAAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 16; Conservat
                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD228143/c
                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
       DEFINITION
                      ACCESSION
VERSION
                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 64
                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 08-AUG-2001
                                                                                                                                    PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 06-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Taupler, R.J., Vernet, C.A., Fernandes, E., Shimkets, R.A., Majumder, K., Padigaru, M., Colman, S.D., Zerhusen, B.D., Spytek, K.A., Burgess, C.E. and Liu, X.

Novel human proteins, polynucleotides encoding them and methods of using the same
Patent: WO 0179294-A 48 25-OCT-2001;

Curagen Corporation (US)

Location/Qualifiers
                                                                                                                                                                                                                                          Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.0%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 1.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5.0%; Score 14.4; DB 1; Length 22; 93.8%; Pred. No. 2.1e+02; ative 0; Mismatches 1; Indels
                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                               Human posh-like protein 1
Patent: EP 1239051-A 1117 11-SEP-2002;
Aeomica, Inc. (US)
                                                                                                                                  AX531608
Sequence 1117 from Patent EP1239051.
AX531608
AX531608.1 GI:25255006
                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22 bp
Sequence 48 from Patent WO0179294.
AX350848
                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 bp
                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX350848.1 GI:18616308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          745 TAGGGTCCCAGGGTCC 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             744 GTAGGGTCCCAGGGTC 759
       744 GIAGGICCCAGGGIC 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 TAGGGCCCAGGGTCC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
synthetic construct
artificial sequences.
                                       2 GIAGGGCCCAGGGIC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTAGGGTCCAAGGGTC 1
                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 93.0.
Thes 15, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                    Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR150270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 63
AR150270/c
LOCUS
                                                                                                                                               DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX350848/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
```

ACCESSION VERSION KEYWORDS SOURCE

LOCUS

RESULT 62

ð

REFERENCE AUTHORS JOURNAL

TITLE

FEATURES

ð

ö

Gaps

. 0

```
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unidentified
                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
16; Conserv
                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                               Unknown.
16;
                             890
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local 2
                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Source
                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX000977/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
 Matches
                                                                                                  RESULT 67
AR313578
                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 68
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BD013890
LOCUS
                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                             ò
                                                 D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 07-0CT-1996
                                           PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                  PR 19-FEB-1999 US 60/120680,23-APR-1999 US 09/298733 PR 17-AUG-1999 US 60/149639,23-SEP-1999 US 60/155686 PR 01-OCT-1999 US 60/157247,29-NOV-1999 US 60/167823 PR 29-NOV-1999 US 60/167821 PR DARIO VALENZUELA,OLIVE YUAN, HEIDI HOFFMAN, JEFF HALL, PETER PI RAPIEJKO PC C12N15/09,A61K38/00,A61P3/10,A61P5/14,A61P11/00,A61P1/06, PC
                                                                                                                                                                                                                                                                                                                                                                                                                   A61P31/18, A61P31/20, A61P31/22, A61P37/00, A61P37/06, C07K14/435,
                                                                                                                                                                                                                                                                                                                                                                                                                                 C12N5/10,
C12P19/34//(C12P19/34,C12R1:91),C12N15/00,C12N5/00,A61K37/02
                                                                                                                                                                                                                                                                                                                                                                    A61P19/02,
PC A61P21/04,A61P25/14,A61P27/02,A61P29/00,A61P31/04,A61P31/10,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                   Valenzuela, D., Yuan, O., Hoffman, H., Hall, J. and Rapiejko, P. Secreted proteins and polynucleotides encoding them Patent: JP 2002536973-A 37 05-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 20;

    .20
    /organism='Artificial Sequence'

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                20 bp DNA linear Secreted proteins and polynucleotides encoding them. BD242886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 20)
Deguchi,T., Kinoshita,M., Katsuragi,K. and Shin,S. Methods and kits for identifying human arylamine N-acetyltransferase genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   э
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers

    .20
    /organism="synthetic construct"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 14.2; DB 1
Pred. No. 2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 14.2; DB
Pred. No. 2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: US 5527677-A 10 18-JUN-1996;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 10 from patent US 5527677.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
                                                                                                                                                                                                                           Artificial Sequence
JP 2002536973-A/37
05-NOV-2002
18-FEB-2000 JP 2000599860
19-FEB-1999 US 60/120680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             803 CTCTCCTCCAACTCAGGGT 821
                                                                                HD242886.1 GI:33052656
JP 2002536973-A/37.
synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        crcagcrccarcrcagggr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        I22261.1 GI:1602615
                                                                                                                                                                                                                                                                                                                                                                                                                                                            oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16; Conservative
                                                                                                                                                                                                               ALPHAGENE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22261
                                                                                                                                                                                                                               SO
                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
             RESULT 65
BD242886
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 66
122261
                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 10-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
ö
                                                                                                                                                             PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                     Unclassified.
1 (bases 1 to 20)
Griffais R., Hoiseth, S.K., Zagursky, R.J., Metcalf, B.J., Peek, J.A., Sankaran, B. and Pletcher, L.D.
 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 20)
Beseme,F. and Blond,J.
BENDOGENETIC RETROVIRAL SEQUENCES, ASSOCIATED WITH AUTOIMMUNE DISEASES OR WITH PREGNANCY DISORDERS
PATENT: WO 9902605-A 22 21-AN-1999;
BIO MERIEUX (FR); BESEME REEDERIC (FR)
Location/Qualifiers
 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                         Chlamydia pneumoniae polynucleotides and uses thereof
Patent: US 6559294-A 4115 06-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 14.2; DB 1; Length 20;
Pred. No. 2e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
 Indels
 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD013890 20 bp DNA Method for recording gene analysis data.
                                                                                                                                                    AR313578 20 bp DNA
Sequence 4115 from patent US 6559294.
AR313578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.2; DB 1
Pred. No. 2e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .20
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX000977 20 bp
Sequence 22 from Patent WO9902696.
                                                                                                                                                                                                                                                                                                                                                                                                                 1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                   CTTACTTCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              928 CCACCCTCCAGAGAATTTT 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           734 ATAGGACTTGGTAGGGTCC 752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 CCATCCTCCGGAGTATTT 20
                                                                     1 crraarrerearcreerse 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 AAATGACTGGGTAGGGTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GI:22554219
                                                                                                                                                                                                              AR313578.1 GI:31707004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX000977.1 GI:7241219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 84.2°
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD013890.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD013890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
```

```
PAT 18-SEP-2002
                                                                                                                                                                                                                                                   Koga.H.
Primer for synthesizing full-length cDNA and use thereof
Patent: UP 2002017375-A 3496 22-JAN-2002;
PELIX RESEARCH INSTITUTE
OS Unidentified
PN JP 2002017375-A/3496
PP 22-JAN-2002
PP 72-JUL-2000 JP 200253172
PP 170SHIO OTA, TETSUO NISHIKAWA, TAKAO ISOGAI, KOJI HAYASHI, SHIZUKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 17-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PC C12P21/02,C12Q1/68//C12P21/08,G06F17/30,C12N15/00,C12N5/00 CC
Description of Artificial Sequence: an artificially CC
synthesized primer
CC sequence
Location/Qualifiers
FT source
1.20
/organism='Unidentified'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                        1 (bases 1 to 20)
Ota,T., Nishikawa,T., Isogai,T., Hayashi,K., Ishii,S., Kawai,Y.,
Wakamatsu,A., Sugiyama,T., Nagai,K., Kojima,S., Otsuki,T. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PC
C12N15/09, C07K14/47, C07K16/18, C12N1/15, C12N1/19, C12N1/21, C12N5/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                          PI ISHII,
PI YURI KAWAI,AI WAKAMATSU,TOMOYASU SUGIYAWA,KEIICHI NAGAI,
SHINICHI KOJIMA,
                                                         בו PAT באחור DNA linear PAT באנושר for synthesizing full-length cDNA and use thereof.
BD128065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.9%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fujino, Y.
Aurora 2 kinase inhibitor
Patent: UP 2002095479-A 7 02-APR-2002;
MITCHISHI TOKYO PHARMACEUTICALS INC
OS Homo sapiens (human)
PD 02-APR-2002
PF 02-APR-2002
PF 22-SEP-2000 UP 2002087928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .20
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TETSUJI OTSUKI, HISASHI KOGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
JP 2002095479-A/7
02-APR-2002
22-SEP-2000 JP 2000287928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD143077
Aurora 2 kinase inhibitor.
BD143077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 825 CIGIGICICITITICITCIC 843
                                                                                                                   BD128065.1 GI:23223010
JP 2002017375-A/3496.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 Crridicicarricircc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD143077.1 GI:27848835
JP 2002095479-A/7.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                         unclassified.
                                                                                                                                                                        unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                   RESULT 71
BD128065/c
                                                                    LOCUS
DEFINITION
                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD143077/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 П
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                Method for recording gene analysis data
Patent: JP 2001112486-A 9 24-APR-2001;
TAKEDA CHEMICAL INDUSTRIES LTD
CARACTICICAL Sequence
PN JP 2001112486-A/9
PD 24-APR-2001
PF 03-AUG-2000 JP 2000235709
PI MASAHIKO FUJINO
PC C12N15/09,C12M1/00,C12Q1/68,G01N33/15,G01N33/50,G06K19/06, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·.
                                                                                                                                                                                                                                                                                                                                  /organism='Artificial Sequence'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.9%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 2e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BD093533 20 bp DNA linear Method of recording results of gene analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fujino, M.
Method of recording results of gene analysis
Patent: WO 0111533-A 9 15-FEB-2001;
TAKEDA CHEMICAL INDUSTRIES LTD, MASAHIKO FUJINO
OS. Artificial Sequence
PN. WO 0111533-A/9
                                                                                                                                                                                                                                                                   G06K19/00
Method for recording gene analysis data
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-AUG-2000 WO 2000JP005196
DS-AUG-1999 UP 99P 222501
MASAHIKO FUJINO
GOGF19/00,C12Q1/68,C12N15/00,G01N33/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                     1. 20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1..20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.9%; Score 14.2; DB 1
84.2%; Pred. No. 2e+02;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                        1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           890 CTTACTTCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    890 CTTACTTCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CTTAATTCTCATCTCCTGC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  crrantricarcreard 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD093533
BD093533.1 GI:22639121
WO 0111533-A/9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct
synthetic construct
artificial sequences.
              synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 84.2'
Matches 16, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 84.2<sup>3</sup>
Matches 16; Conservative
 JP 2001112486-A/9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-FEB-2001
                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                  C12N15/00,
PC G06K19,
CC Method
FH Key
FT source
                                                                                  Fujino, M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD093533
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pp
```

0

PC

```
891 TTACTTCTCAGCTTCTGCG 909
                                                                                                                                                                                                                                                                                                                                                                                     926 CACCACCTCCAGAGATT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 Trecrecreasecretese 19
                                                                                                                                                                                                                                                                                                                                                                                                                   19 caccacccrecagradar 1
                                                          A90814.1 GI:6739224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                          unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                            KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR036426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
190814/c
                                                                                                                                                                                                                         FEATURES
                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       129867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                     PAT 17-JUL-2003
                C12N15/09, A61K31/7088, A61K45/00, A61K48/00, A61P35/00, A61P43/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Endogenetic retroviral sequences, associated with autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 20)
Beseme, F., Blond, J.L., Bouton, O., Mandrand, B. and Mallet, F.
Endogenetic retroviral sequences, associated with autoimmune diseases and/or with pregnancy disorders
Patent: "PP 202512530-A 22 23-APR-2002;
BIO MERIEUX
                                                                                                                                                                                                                                                                                                                                                                                                    BD196256 20 bp DNA linear PAT 17-J
Endogenetic retroviral sequences, associated with autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-JUL-1998 JP 1999508244
07-JUL-1997 FR 97/08815
FREDERIC BESEME, JEAN LUC BLOND, OLIVIER BOUTON, BERNARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PI FRANCOLS MALLET
PC CLANIS/48,C07KL4/15,C12Q1/68,C07KL6/10,G01N33/569
Strandedness: Single;
CC Topology: Linear;
CC Endogenetic retroviral sequences, associated with diseases
CC and/or with pregnancy disorders
FH Key Location/Qualifiers
FT source 1. 20
FT Source /organism='Unidentified'
                                                                                                         /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
4.9%; Score 14.2; DB 1; Length 20;
Best Local Similarity 84.2%; Pred. No. 2e+02;
Matches 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                       Query Match 4.9%; Score 14.2; DB 1; Length 20; Best Local Similarity 84.2%; Pred. No. 2e+02; Matches 16; Conservative 0; Mismatches 3; Indels
                       C12N9/99,
C12N15/00
Aurora 2 kinase inhibitor
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                   diseases and/or with pregnancy disorders.
                                                                                                                                            1. .20
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .20
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   734 ATAGGACTTGGTAGGGTCC 752
                                                                                                                                                                                                                                                                                         860 GCTCCAGTTGGAACACTTT 878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unidentified
JP 2002512530-A/22
23-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 GCACCACTIGGAACAGIII 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD196256.1 GI:33006026
JP 2002512530-A/22.
 YASUHIRO FUJINO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MANDRAND
   FFFGBCBE
                                                                                                                                                                                                                                                                                                                                                                       RESULT 73
BD196256/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                             FEATURES
```

TITLE

g

COMMENT

74

RESULT

à

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 06-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 29-SEP-1999
   PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·
0
                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                  unclassified.

1 (bases 1 to 21)
Albers, G.A. and Groenen, M.A. SELECTION FOR DWARPISM IN POULTRY
PATENT: WO 9830689-A 2.7 I6-JUL-1998;
BURIBRID B V (NL); ALBERS GERARDUS ANTONIUS ARNOL (NL)
LOCATION/QUalifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
4.9%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                          Query Match
4.9%; Score 14.2; DB 1; Length 21;
Best Local Similarity 84.2%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              l (bases 1 to 21)
Seizinger,B.R., Kley,N.A. and Bianchi,A.B.
NF2 isoforms
Patent: US 5578462-A 18 26-NOV-1996;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    l (bases 1 to 21)
Seizinger,B.R., Kley,N.A. and Bianchi,A.B.
NPZ isoforms
Patent: US S872214-A 18 16-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 from patent US 5872214.
AR036426.1 GI:5953094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21 bp | Sequence 18 from patent US 5578462. | 129867 | GI:1820658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                  1. .21
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
Sequence 27 from Patent WO9830689.
A90814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .21
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
```

```
AX822624
                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                    REFERENCE
                                                                                                                                                                    AUTHORS
                 AX822624
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 81
                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX826264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                     pp
                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                           0
                                                                                                                                                                                                              PAT 26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lander, E.S., Gargill, M., Ireland, J.S., Bolk, S., Daley, G.Q. and Mccarthy, J.J.
Single nucleotide polymorphisms in genes
Patent: Wo 0118250-A 1791 15-MAR-2001;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH (US); Millennium
Pharmaceuticals, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.9%; Score 14.2; DB 1; Length 21; larity 84.2%; Pred. No. 2.1e+02; Conservative 0; Mismatches 3; Indels
                                           Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.9%; Score 14.2; DB 1; Length 21; Best Local Similarity 76.2%; Pred. No. 2.1e+02; Matches 16; Conservative 1; Mismatches 4; Indels
                                        Query Match 4.9%; Score 14.2; DB 1; Length 2 Best Local Similarity 84.2%; Pred. No. 2.1e+02; Matches 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                            Unclassified.

1 (bases 1 to 21)
Groenen,M.A.M. and Albers,G.A.A.
Selection for dwarfism in poultry
Patent: US 6440666-A 27 27-AUG-2002,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 bp Di
Sequence 1791 from Patent WO0118250.
AX096613
AX096613.1 GI:13512867
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                      21 bp
Sequence 27 from patent US 6440666.
AR223921.1 GI:23332520
                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pharmaceuticals, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         778 AGGCCAGCCCCTCTGGTGCCA 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 ATGGCAGCCTYA.CAGGTGCCA 21
                                                                                                    891 TTACTTCAGCTTCTGCG 909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           926 CACCACCTCCAGAGATT 944
                                                                                                                                1 Trecrectedecreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 CACCACCTGCAGTGAAGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                        DEFINITION
ACCESSION
                                                                                                                                                                                            AR223921/c
LOCUS
                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 78
AX096613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                             RESULT 77
                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                     à
                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

g

```
Adorjan, P., Burger, M., Maier, S., Nimmrich, I., Becker, E., Lesche, R., Rujan, T. and Schmitt, A. Method and nucleic acids for the analysis of a colon cell proliferative disorder

Patent: EP 1340818-A 516 03-SEP-2003;

Epigenomics AG (DE)

Location/Qualifiers
  PAT 12-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 11-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Adorjan, P., Burger, M., Maier, S., Nimmrich, I., Becker, E., Lesche, R., Rujan, T. and Schmitt, A. Method and nucleic acids for the analysis of a colon cell proliferactive disorder

Patent: WO 03072821-A 516 04-SEP-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 24-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.9%; Score 14.2; DB 1; Length 21; B4.2%; Pred. No. 2.1e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 21;
  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
4.9%; Score 14.2; DB 1; Length 2
Best Local Similarity 84.2%; Pred. No. 2.1e+02;
Matches 16; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                        1. .21
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="caxon:32630"
/note="Detection primer for MSH4"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.21
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Detection primer for MSH4"
  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX826264 21 bp Di
Sequence 516 from Patent W003072821.
AX826264
AXB22624 21 bp Sequence 516 from Patent EP1340818.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX004061 21 bp
Sequence 6 from Patent W09923222.
AX004061 GI:9927695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Epigenomics AG (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       915 ATTATCATCACCACCACC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              915 ATTATCATCACCACCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 ACTATAATAACCACCACC 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 ACTATAATAACCACCACCC 20
                                                           AX822624.1 GI:39749260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX826264.1 GI:39751778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
synthetic construct
artificial sequences.
                                                                                                   synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX004061/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
```

Mon Jul 12 11:21:14 2004

rge.res

```
1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                            I53832.1 GI:2475035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 88.2
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15; Conservative
                                                                                         15; Conservative
                                                                                                                                                                                                                                                                                                                                         Unclassified.
                                                                           Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                            Query Match
                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 85
AX214571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                    84
                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                 RESULT
I53832
                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 30-MAR-2001
                                                                        Cysteine noose antibody libraries, means for their production and uses thereof Patent: Wo 9923222-A 614-MAY-1999, CAMBRIDGE ANTIBODY TECH (GB); OSBOURN JANE KATHARINE (GB) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lander, E.S., Gargill, M., Ireland, J.S., Bolk, S., Daley, G.Q. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mccarthy,J.J.
Single nuclectide polymorphisms in genes
Single nuclectide polymorphisms in genes
Patent: WO 0118250-A 167 15-MAR-2001;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH (US) ; Millennium
Pharmaceuticals, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T. C-myb ribozymes having 2'-5'-linked adenylate residues Patent: US 5817796-A 1573 06-0CT-1998;
                                                                                                                                                                                                                                              Query Match
4.8%; Score 14; DB 1; Length 21;
Best Local Similarity 77.8%; Pred. No. 2.3e+02;
Matches 14; Conservative 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 4.8%; Score 14; DB 1; 1
Best Local Similarity 87.5%; Pred. No. 2.3e+02;
                                                                                                                                                                      organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 bp DM.
Sequence 1573 from patent US 5817796.
AR046780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .21
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                   /mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                         21 Dp
Sequence 167 from Patent W00118250.
AX094989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                        21 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1;
                                                                                                                                                                                                                                                                                                            752 CCAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX094989.1 GI:13511192
                                                                                                                                                                                                                                                                                                                                CCAGGGTYCCYTGGCCCC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR046780.1 GI:5968245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCAYCACCACACTC 21
   synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                              Osbourn, J.K.
                                                                                                                                                                                                                                                                                                                                                                                                                        AX094989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14;
                                                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 83
AR046780
LOCUS
                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                        RESULT 82
AX094989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                REFERENCE
                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ó
                                            6
                                                                                                                                                                                                                                     PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and
nogo gene expression
Patent: WO 153103-A 13 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·.
                                              .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 17)
Stinchcomb.D.T., Draper,K., McSwiggen,J. and Jarvis,T.
C-myb targeted ribozymes
Patent: 18 5646642-A 1573 08-UUL-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.8%; Score 13.8; DB 1; Length 17; 88.2%; Pred. No. 2e+02; tive 0; Mismatches 2; Indels
4.8%; Score 13.8; DB 1; Length 17; 88.2%; Pred. No. 2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.8%; Score 13.8; DB 1; Length 17;
88.2%; Pred. No. 2e+02;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db xref="taxon:32630"
/noTe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RNA
                                                                                                                                                                                                                                     17 bp DN/
Sequence 1573 from patent US 5646042.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp
Sequence 13 from Patent W00159103.
AX214571.
AX214571.1 GI:15524614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       799 AGAGCICICCICCAACT 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           920 CATCACCACCACCTCC 936
                                                                                        799 AGAGCTCTCCTCCAACT 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 carcarcrccaccrcc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AAAGCTCTCCTCGAACT 17
                                                                                                                1 AAAGCTCTCCTCGAACT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
synthetic construct
artificial sequences.
```

```
Query Match
                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX599708/c
                                                                                                   JOURNAL
                                                        REFERENCE
                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                       RESULT 89
                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
KEYWORDS
                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                   AR268656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                       TITLE
                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                SOURCE
                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                          PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 12-MAR-1998
                                                                                                                                                                     Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0153103-A 772 16-AUG-2001;
RIBOZYME FHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Blatt,L., Mcswiggen,J. and Chowrira,B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 773 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
McSwiggen, James (US) ; Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.8%; Score 13.8; DB 1; Length 17; Best Local Similarity 88.2%; Pred. No. 2e+02; Matches 15; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 13.8; DB 1; Length 17;
Pred. No. 2e+02;
                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                          /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon.32630"
/note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="synthetic construct"
/mol_type="unassigned RNA"
/mol_txref="taxon:32630"
/noFe="Nucleic Acid"
                                          RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                       AX215330 17 bp 8 Sequence 772 from Patent WO0159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 773 from Patent W00159103. AX215331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 bp
Sequence 6 from Patent WO9720197.
A63079
A63079.1 GI:3716943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                  AX215330.1 GI:15525373
                                                                                                                                                                                                                                                                                                                                                                                                                           921 ATCACCACCACCTCCA 937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX215331.1 GI:15525374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  922 TCACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ATCATCTCCACCCTCCA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 rcarcrccacccrccag 17
                                                                                                            synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 88.2%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
                                                                      AX215330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
                                                                                                                             ORGANISM
                                                     DEFINITION
                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 87
AX215331
LOCUS
          RESULT 86
AX215330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 88
A63079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                               KEYWORDS
                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 14-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Berlin, K., Braun, A., Distler, J., Guetig, D., Howe, A., Mueller, J., Olek, A., Piepenbrock, C., Adorjan, P., Grabs, G., Lesche, R., Leu, B., Lewin, A., Lipscher, E., Maier, S., Model, F., Mueller, V., Otto, T., Pelet, C. and Ziebarth, F., Maier, S., Model, F., Mueller, V., Otto, T., Methods and nucleic acids for the analysis of hematopoietic cell parent: WO 0207272-A 1048 03-OCT-2002; Epigenomics AG (DE)
                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                         4.8%; Score 13.8; DB 1; Length 18; 88.2%; Pred. No. 2.1e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.8%; Score 13.8; DB 1; Length 18; 88.2%; Pred. No. 2.1e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                      Arguello, R., Avakian, H. and Madrigal, A. METHOD FOR IDENTIFYING AN UNKNOWN ALLELE PATENT: WO 9720197-A 6 05-JUN-1997; ANTHONY NOLAN BONE MARROW TRUS (GB) Other publication AU 7703796 19970619.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.

1 (bases 1 to 18)

1 squello, R., Avakian, H. and Madrigal, A.
Method for identifying an unknown allele
Patent: US 6500614-A 6 31-DEC-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX599708 18 bp DN
Sequence 1048 from Patent W002077272.
AX599708
                                                                                                                                                                                                                              1. .18
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR268656 18 bp
Sequence 6 from patent US 6500614.
AR268656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                929 CACCCTCCAGAGAATTT 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  929 CACCCTCCAGAGATTT 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR268656.1 GI:29699271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX599708.1 GI:28399856
                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 CACCCTCCAGAGGATGT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 CACCCTCCAGAGGATGT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15; Conservative
unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 15; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
```

```
753 CAGGGTCCCTAGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
1 (bases 1 to 20)
                                                                                                                                                                                Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
                           Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                 source
                                                                                                             DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 94
AR099495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                     RESULT 93
AR067189
                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR178776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                  rocus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                           à
                     g
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shir,A. and Levitzky,A.
Selective killing of cells by activation of double-stranded rna
dependent protein kinase-pkr
Patent: WO 0157205-A 18 09-AUG-2001;
Yissum Research and Development Co., Hebrew University of Jerusalem
(IL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 31-AUG-2001
                                                                                                              ô
                                                                                                                                                                                                                                     PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 19)
Hwang,T.-S., Wu,S.-P., Chou,H.-H., Chen,H.-Y., Lin,L.-S., Tsai,H.
and Chang,E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                        Demino John Transferase for simultaneously producing glutaryl-7-aminocephalosporanic acid and D-amino acid Patent: US 6337190-A 6 08-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                              ;
1..18 /organism="synthetic construct" /mol_type="unassigned DNA" /db_xref="taxon:32630" /note="Detection oligonucleotide for C-ABL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.8%; Score 13.8; DB 1; Length 19;
88.2%; Pred. No. 2.3e+02;
rative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 19;
                                                                                  Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match

4.8%; Score 13.8; DB 1;
Best Local Similarity 88.2%; Pred. No. 2.38+02;
Matches 15; Conservative 0; Mismatches 2;
                                                                                  Query Match

4.8%; Score 13.8; DB 1;
Best Local Similarity 88.2%; Pred. No. 2.1e+02;
Matches 15; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .19
/organism="synthetic construct"
/mol_type="unassigned DNA"
db_xref="taxon:32630"
1. .19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 from Patent WO0157205.
                                                                                                                                                                                                                                       AR182088 19 bp
Sequence 6 from patent US 6337190.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901 GCTTCTGCGATCAGATT 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX207609.1 GI:15422315
                                                                                                                                           921 ATCACCACCACCTCCA 937
                                                                                                                                                                                                                                                                                AR182088.1 GI:20225004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GCTTCTGCGTTCTGATT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                        18 ACCACCACCACCTCAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              primer_bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
     source
                                                                                                                                                                                                                                       LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 92
AX207609
LOCUS
                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                              RESULT 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                           AR182088
                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                  셤
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 20-APR-2002
                                                                                                         PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dennett, C.Frank. and Vickers, T.A.

Bennett, C.Frank. and Vickers, T.A.

Oligonucleotide compositions and methods for the modulation of the expression of B7 protein

Patent: US 6077833-A 2 20-JUN-2000;

Location/Qualifiers
                                                                                                                                                                                                                                                                1 (bases 1 to 20)
Evans, G.A. and Smith, M.W.
Method for generation of sequence sampled maps of complex genomes
Patent: US 5851760-A 537 22-DEC-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
4.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                               4.8%; Score 13.8; DB 1; Length 20; 88.2%; Pred. No. 2.4e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                       AR067189 20 bp DN
Sequence 537 from patent US 5851760.
AR067189.1 GI:5998411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 bp 1
Sequence 22 from patent US 6319906.
AR178776
AR178776.1 GI:20219914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR099495 20 bp 20 bp 8equence 22 from patent US 6077833. AR099495 GI:12809261
                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                       1. .20
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   823 GGCTGTGTCTTTTCT 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         762 TAGGCCTCCACTTCTGA 778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3 GGCTGTGTCCCTCTTCT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 TAAGACTCCACTTCTGA 20
CAGGGTCCCTTGGCCCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 88.2
Matches 15; Conservative
```

PAT 30-MAR-2001

and

AUTHORS

JOURNAL

FEATURES

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                          Lander, E.S., Gargill, M., Ireland, J.S., Bolk, S., Daley, G.Q. and McGarthy, J.J.
McGarthy, J.J.
Single nucleotide polymorphisms in genes
Patent: WO 0118250-A 2166 15-WAR-2001;
WHITEHEAD INSTITUTE FOR BIOMEDICAL RESEARCH (US); Millennium
Pharmaceuticals, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Drosophila melanogaster (fruit fly)
Drosophila melanogaster
Eukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 13.8; DB 1; Length 21;
Pred. No. 2.5e+02;
1; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dickson, B., Berger, J., Suzuki, T. and Knoblich, J. Method for identifying therapeutic targets by use of screens in drosophila melanogaster. Batent: WO 03042407-A 52 22-MAY-2003; BOCHRINGER INGELHEIM INTERNATIONAL GMBH; CD Patents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Drosophila melanogaster"
/mol_type="unassigned DNA"
/db_xref="taxon:7227"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

4.8%; Score 13.8; DB 1;
Best Local Similarity 88.2%; Pred. No. 2.5e+02;
Matches 15; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                           21 bp Dl
Sequence 2166 from Patent W00118250.
AX096988
                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 52 from Patent W003042407. AX772262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX776570 21 bp
Sequence 1 from Patent WO03048369.
AX776570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    835 TTTCTTCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX096988.1 GI:13513256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX772262.1 GI:32438835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    824 GCTGTGTCTCTTTCTT 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.8%;
                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTTTGTCTCTTTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 78.9.
These 15, Conservative
                                                                                                                                                                                          Homo sapiens
                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 100
AX776570/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                           RESULT 98
AX096988
                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX772262
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                     PAT 20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 20)
Popoff, I. and Myatt, J.
Antisense modulation of damage-specific DNA binding protein 2, p48
expression
Patent: US 6379960-A 37 30-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·
0
Bennett, C.Frank. and Vickers, T.A. Oligomucleotide compositions and methods for the modulation of the expression of B7 protein Patent: US 6319906-A 22 20-NOV-2001; Location/Qualifiers
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                               Query Match 4.8%; Score 13.8; DB 1; Length 20; Best Local Similarity 88.2%; Pred. No. 2.4e+02; Matches 15; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
4.8%; Score 13.8; DB 1; Length 20;
Best Local Similarity 88.2%; Pred. No. 2.4e+02;
Matches 15; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense modulation of caspase 9 expression
Patent: US 6492170-A 116 10-DEC-2002;
Location/Qualifiers
1...20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.8%; Score 13.8; DB 1; 1
88.2%; Pred. No. 2.4e+02;
                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 bp DI
US 6492170.
                                                                                            1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                          Sequence 37 from patent US 6379960.
AR208119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1..20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR265935
Sequence 116 from patent
AR265935
AR265935.1 GI:29694781
                                                                                                                                                                                                                                       762 TAGGCCTCCACTTCTGA 778
                                                                                                                                                                                                                                                                                                                                                                                                                      AR208119.1 GI:21508052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 853 CGTCCTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        752 CCAGGGTCCCTAGGCCT 768
                                                                                                                                                                                                                                                            4 TAAGACTCCACTTCTGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTCCTGGCTCCAGATG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 CCAGGGTGCCTTGGCCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 20)
Watt, A.T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15;
```

DEFINITION ACCESSION VERSION KEYWORDS

RESULT 96

ö g AR208119

ORGANISM

SOURCE

AUTHORS TITLE

REFERENCE

JOURNAL

FEATURES

·: 0

Gaps

0

PAT 02-JUL-2003

PAT 14-JUL-2003

0

Gaps

·,

οĘ

KEYWORDS SOURCE ORGANISM

AUTHORS TITLE JOURNAL

FEATURES

δ

REFERENCE

LOCUS

RESULT 97 AR265935

à g ACCESSION VERSION

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 20)
Diamandis, B., Dunn, J.M. and Stevens, J.K.
Diamandis, B., Dunn, J.M. and Stevens, J.K.
Diamandis, B., Dunn, J.M. and Stevens, J.K.
p53 mutations
Patent: US 6071726-A 17 06-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                   ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
0
                                                                                                                                                                                                                                                                  4.8%; Score 13.8; DB 1; Length 21; 88.2%; Pred. No. 2.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.7%; Score 13.6; DB 1; Length 20;
80.0%; Pred. No. 2.6e+02;
ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                       /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_tref="taxon:32630"
/noTee="Primer used for uidA(GUS)forward"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 20)
Bennett, C. Frank. and Mirabelli, C.K.
Oligonucleotide modulation of cell adhesion
Patent: US 5843738-A 67 01-DEC-1998;
Location/Qualifiers
                                                                                        Gould, J.H. and Newton, R.J.
Method of transforming intect plants
Patcht: WO 03048459-A 1 12-JUN-2003;
The Texas A & M University System (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 67 from patent US 5843738. AR062667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 from patent US 6071726. AR097393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           825 CIGIGICICITITICITCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 crerercrercrect 20
                                                                                                                                                                                                                                                                                                                                910 ATCAGATTATCATCACC 926
AX776570.1 GI:32694107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR097393.1 GI:12806123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR062667.1 GI:5990358
                                                                                                                                                                                                                                                                                                                                                            20 AGCCGATTATCATCACC 4
                             synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80.08;
                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 88.2%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                          AR062667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR097393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR097393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                            AR062667
                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
```

```
..
                              ;
0
                                                                                                                                                                 PAT 14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 20)

Bennett, C.Frank., Mirabelli, C.K. and Baker, B.
Antisense modulation of cell adhesion molecule expression and
treatment of cell adhesion molecule-associated diseases
Patent: US 6096722-A 67 01-AUG-2000;
                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                  4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 2.6e+02; tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.7%; Score 13.6; DB 1; Length 20;
80.0%; Pred. No. 2.6e+02;
iive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                 linear
                                Indels
   Length
                                                                                                                                                                                                                                                                                1 (bases 1 to 20)
Bennett, C. Frank, and Mirabelli, C.K.
Bonnett, G. Frank, and Mirabelli, C.K.
Coligonucleotide modulation of cell adhesion
Patent: US 6093811-A 67 25-JUL-2000;
Location/Qualifiers
1. 20
/organism="unknown"
4.7%; Score 13.6; DB 1;
80.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 67 from patent US 6096722.
AR105592
                                                                                                                                                             Sequence 67 from patent US 6093811.
AR104770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR123254 20 bp
Sequence 67 from patent US 6169079.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             825 CTGTGTCTTTTTTTTTTTT 844
                                                             813 ACTCAGGGTTGGCTGTGTCT 832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                825 CTGTGTCTTTTCTTCTT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGTGTCTCCTGTCCGCT 20
                                                                              1 ACCCAGGGTTGGAAGCGTCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 crerererereres 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ARI23254
AR123254.1 GI:14108220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR105592.1 GI:12819189
                                                                                                                                                                                                           AR104770.1 GI:12817478
                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 80.0°
....hes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 Similarity 80.0
   Query Match
Best Local Similarity 80.0
Matches 16; Conservative
                                                                                                                                                                                                                                                                      Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                   RESULT 103
AR104770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 104
AR105592
                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                             JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR123254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

Nove]

0

Gaps

0

4; Indels

Length 20;

PAT 07-0CT-1996

linear

ö

Gaps

.; 0

4; Indels

Length 20;

PAT 07-0CT-1996

linear

rge.res

```
PC C12N1/15,
PC C12N1/19, C12N1/21, C12N5/10, C12Q1/68, G01N33/50, G01N33/53, G01N33/ PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.

(I (bases I to 20)

Diamandis.E., Dunn,J.M. and Stevens,J.K.

Method, reagents and Kit for diagnosis and targeted screening for P53 mutations

P53 mutations

Petent: US 5552283-A 17 03-SEP-1996;
       PC G01N33/569,G01N33/577//C12P21/68,G01N33/50,G01N33/53,G01N
granulocytic ehrlichia genes and uses thereof FH Rev
FT source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.7%; Score 13.6; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 20)
Bennett, C. Frank. and Mirabelli, C.K.
Oligonucleotide modulation of cell adhesion
Patent: US 5514788-A 67 07-MAX-1996;
Location/Qualifiers
                                                                                                                                                                                                                                                                                 Query Match
4.7%; Score 13.6; DB 1;
Best Local Similarity 80.0%; Pred. No. 2.6e+02;
Matches 16; Conservative 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.7%; Score 13.6; DB 1;
80.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 4;
                                                                                                                                                  /organism='Bacteria'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 bp
Sequence 17 from patent US 5552283.
125698.1 GI:1605568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 67 from patent US 5514788.
120669
120669,1 GI:1601024
                                                                                                                                                                                                        /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              825 CIGIGICICITITICITIC 844
                                                                                                                                                                                                                                                                                                                                                       882 GAGATGCACTTACTTCTCAG 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CTGTGTCTCCTGTCTCCGCT 20
                                                                                                                                                                                                                                                                                                                                                                                           1 cascriccaarracriccgas 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 80.0
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      I20669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 109
125698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                         ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JP 2002527042-A/24
27-AUG-2002
23-OCT-1998 US. 60/094381
CHERYL I NURPHY, ROBERT F MASSUNG
CLEN15/09, A01K67/027, A61K39/00, A61P31/00, C07K14/195, C07K16/12,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        unclassified.

unclassified.

I (bases 1 to 20)

Murphy, C.I. and Massung, R.F.

Murphy, C.I. and Massung, R.F.

Patent: JP 2005527042-A 24 27-AUG-2002;

AQUILA BIOPHARMACEUTICALS INC, CENTERS FOR DISEASE CONTROL AND PREVENTION

OS Bacteria

PN JP 2002527042-A/24

PD 27-AUG-2002

PF 23-OCT-1998 JP 2000562526

PR 23-OCT-1998 JP 2000562526
                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                 o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel gramulocytic chrlichia genes and uses thereof. BD260089.1 GI:33069859 UP 2002257042-A/24. unidentified unidentified
                                                                                                                                                                                                                                         Query Match
4.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 2.6e+02;
Matches 16; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 2.6e+02; ative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (Dassel to 20)

McKay,R., Butler,M.M., Wyatt,J. and Cowsert,L.M.
Antisense modulation of pepck-cytosolic expression
Patent: US 6187545-A 65 13-FEB-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                            Unclassified.
Unclassified.
1 (bases 1 to 20)
Bennett, C.Frank. and Mirabelli, C.K.
Oligonucleotide inhibition of cell adhesion
Patent: US 6169079-A 67 02-JAN-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                             AR129661 20 bp I
Seguence 65 from patent US 6187545.
AR129661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                   /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                  825 CIGIGICICITITICITCI 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     865 AGTIGGAACACTITCCIGAG 884
                                                                                                                                                                                                                                                                                                                                                   1 crefercrererececr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 AATGGGAACACCTTCCGGAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR129661.1 GI:14117558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 80.0%
...rhes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.
               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                      Unknown.
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                         REFERENCE
                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                              AR129661
                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD260089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
```

à

Peek, J.A.,

ċ

Gaps

0

PAT 12-SEP-2003

REFERENCE AUTHORS TITLE JOURNAL FEATURES

KEYWORDS SOURCE

RESULT 110

133362 LOCUS

```
Barany, F., Zirvi, M., Gerry, N.P., Favis, R. and Kliman, R. Method of designing addressable array for detection of nucleic acid sequence differences using ligase detection reaction Patent: WO 0179548-A 8472 25-OCT-2001, CORNELL RESEARCH FOUNDATION, INC. (US)
                           1 (bases 1 to 20)
Griffais,R., Hoiseth,S.K., Zagursky,R.J., Metcalf,B.J.,
Sankaran,B. and Fletcher,L.D.
Chlamydia pneumoniae polynucleotides and uses thereof
Patent: US 6559294-A 6553 06-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 2.6e+02; ive 0; Mismatches 4; Indels
                                                                                                                                                                                             4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 2.6e+02; ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.7%; Score 13.6; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xxef="taxon:32630"
/note="Hypothetical Probe Sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cell adhesion
                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX296710 20 bp DN
Sequence 8472 from Patent WO0179548.
AX296710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.

1 (bases 1 to 20)
Bennett, C.F. and Mirabelli, C.K.
Oligonucleotide inhibition of cell ac
Patent: US 6300491-A 67 09-OCT-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                              Sequence 67 from patent US 6300491.
                                                                                                                              1. .20
/organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGTGTCTCTTTCTTCT 844
                                                                                                                                                                                                                                                                  954 AAGAGCCAAATTGACTCTCT 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 crerercierciececr 20
                                                                                                                                                                                                                                                                                       AX296710.1 GI:17058399
                                                                                                                                                                                                                                                                                                                                                                                                                                    AR370592.1 GI:34607345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 80.0
Matches 16; Conservative
                                                                                                                                                                                                                                   16; Conservative
                 Unclassified.
                                                                                                                                                                                                                  Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 114
AX296710/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
ORGANISM
                                                                                                                                                                                                                                                                                                                                                    RESULT 113
AR370592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                               TITLE
JOURNAL
FEATURES
                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 12-JUN-2003
                 ö
                                                                                                                                                                     PAT 06-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 20)
Griffais,R., Hoiseth,S.K., Zagursky,R.J., Metcalf,B.J., Peek,J.A.,
Sankaran,B. and Fletcher,L.D.
                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                 ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chlamydia pneumoniae polynucleotides and uses thereof
Patent: US 6559294-A 1418 06-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.7%; Score 13.6; DB 1; Length 20;
10.0%; Pred. No. 2.6e+02;
Ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4; Indels
                                                                                                                                                                     linear
Pred. No. 2.6e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                  Toases 1 to 20)

Bennett, C. Frank. and Mirabelli, C.K.
Oligonuclectide modulation of cell adhesion
Patent: US 5591623-A 67 07-JAN-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.7%; Score 13.6; DB 1;
80.0%; Pred. No. 2.6e+02;
ative 0; Mismatches 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1418 from patent US 6559294.
AR310881
                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR316016 20 bp DNi
Seguence 6553 from patent US 6559294.
AR316016
                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                   20 bp
Sequence 67 from patent US 5591623.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .20
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              740 CITGGTAGGGTCCCAGGGTC 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         825 CIGIGICICITITICITCT 844
                                                  813 ACTCAGGGTTGGCTGTGTCT 832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 crigeraccircracacic 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGTGTCTCTGTCTCCGCT 20
                                                                                 1 AcccadedriceAAAccercr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR316016.1 GI:31709442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR310881.1 GI:31704307
 Best Local Similarity 80.0%;
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ilarity 80.0%;
Conservative
                                                                                                                                                                                                       I33362
I33362.1 GI:1824153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR316016/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
FEATURES
```

RESULT 111

AR310881 LOCUS

VERSION KEYWORDS SOURCE

REFERENCE AUTHORS

ö

Gaps

0;

PAT 21-NOV-2001

ð qq

```
Query Match
Best Local Similarity 80.0°
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16; Conservative
                                                                                                                                                                                                                                                                                                                              uses therefor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 16; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                             RESULT 117
BD085698/c
                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD225104/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                      셤
                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 П
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                           0
                                                                                                                                            PAT 10-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                        Communi,D., Suarez,N., Detheux,M., Brezillon,S., Lannoy,V., Parmentier,M. and Boeynaems,J.M.
The natural ligand for orphan g protein coupled receptor gpr86 and methods of use
Patent: WO 03014731-A 8 20-FEB-2003;
Euroscreen S.A. (BE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Artificial Sequence
JP 2001231569-A/10
28-AA0G-2001
28-AAG-2001
YOSHIHLRO HAKAMADA,KELJI ENDO,SHUICHI TAKIZAWA,HIROMI KUBOTA,TORU KOBAYASHI,SHUJI KAWAI
CLINIS/09,CLIZNI/00,CLIZNI/15,CLIZNI/19,CLIZNI/21,CLIZNS/10,CLIZNI/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JP 2001231569-A/10.
synthetic construct
synthetic synthetic synthetic artificial sequences.

1 (bases 1 to 20)
Hakamada, Y., Endo, K., Takizawa, S., Kubota, H., Kobayashi, T. and
                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                              4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 2.6e+02; tive 0; Mismatches 4; Indels
                                                                                                                                             linear
                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       designed DNA based on S237 cellulase Key Location/Qualifiers. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1..20
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                               Alkaline cellulase gene
Patent: JP 2001231569-A 10 28-AUG-2001;
KAO CORP
                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                        0; Mismatches
                                                                                                                                         AX741407 20 bp
Sequence 8 from Patent WO03014731.
AX741407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                 741 TIGGTAGGGICCCAGGGICC 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               826 TGTGTCTTTTCTTCTG 845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 IGIGICGTITITICTICGGIG 20
                                                                          20 rrcdrrdcdrccchaggrcc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BD016478
Alkaline cellulase gene.
BD016478
                                                                                                                                                                               AX741407.1 GI:30524195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD016478.1 GI:22557654
             80.08;
                                                                                                                                                                                                      synthetic construct
synthetic construct
artificial sequences.
          Best Local Similarity 80.09
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kawai,S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX741407
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 116
BD016478/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                 RESULT 115
                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
```

ð g

```
Novel human delta 3 compositions and therapeutic and diagnostic abouses therefor.
                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD225104 20 bp DNA linear PAT 17-JUL-2003 Antisense modulation of expression of tumor necrosis factor receptor-associated factor (TRAF).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 20)
Mccarthy, S. A. and Gearing, D. P.
Novel human delta 3 compositions and therapeutic and diagnostic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08/872855 PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD25104.1 GI:33034874

BD255104.1 GI:33034874

JP 200256095-A/239

Synthetic construct

SM synthetic construct

artificial sequences.

I (bases 1 to 20)

S Baker, B.F., Cowsert, L.M., Monia, B.P. and Xu, X.S.

Antisense modulation of expression of tumor necrosis factor receptor-associated factor (TRAF)

L Patent: JP 2002526095-A 239 20-AUG-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence

PN JP 2002526095-A/239

PD 20-AUG-2002
                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent: JP 2001521382-A 10 06-NOV-2001;
MILLENNIUM PHARMACEUTICALS INC
OS ATLIFICIAL SEQUENCE
PN JP 2001521382-A/10
PD 06-NOV-2001
PF 06-APR-1999 UP 1998542992
PR 04-APR-1997 US 08/832633,11-JUN-1997 US 08/872855
SEAN A MCCARTHY, DAVID P GEARING
PC CI2N15/12,C07K14/47,C12N15/62,C07K16/18,A61K38/16 CC
Description of artificial sequence: primer
FH KEY
                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 2.6e+02; tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'organism='Artificial Sequence'
                                                 4; Indels
4.7%; Score 13.6; DB 1;
80.0%; Pred. No. 2.6e+02;
tive 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .20
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                            843 CTGAAGACAGCGTCCTGGCT 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              948 CGCAAGAGAGCCAAATTGA 967
                                                                                                                            CTGGAGTCAGCGTCCGGACT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 CGCGAACAGAGCCAGATTGA 1
                                                                                                                                                                                                                                                                                                                                                            BD085698.1 GI:22631308
JP 2001521382-A/10.
```

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 17)

1 (bases 1 to 17)

2 Landers, J.E., Jordan, B., Housman, D.E. and Charest, A. Methods and products related to genotyping and DNA analysis

NASSACHUSETRES INSTITUTE OF TECHNOLOGY

OS Homo sapiens (human)

PN UP 2002525127-A/486

PD 13-AUG-2002

PP 24-SEP-1999 UP 2000572407

PR 25-SEP-1999 US 60/101757

PI JOHN E LANDERS, BARBARA, JORDAN, DAVID E HOUSWAN, ALAIN CHAREST PC
                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)

19 2022252127-A/486

113-AUG-2002

2 24-SEP-1999 JP 2000572407

2 25-SEP-1999 JB 60/101757

1 JOHN E LANDERS, BARBARA JORDAN, DAVID E HOUSMAN, ALAIN CHAREST PC

C12N15/09,C12Q1/68,G01N33/53,G01N33/566,G01N33/58,G01N37/00, PC
                                                                                                                                                           BD241539 17 bp DNA linear PAT 17-JUL-2003 Methods and products related to genotyping and DNA analysis. BD241539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Methods and products related to genotyping and DNA analysis FH _{\mbox{\scriptsize V}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 17)
Stinochcomb.D.T., Draper,K., McSwiggen,J. and Jarvis,T.
C.myb targeted ribozymes
Patent: US 5646042-A 1575 08-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.6%; Score 13.4; DB 1; Length 17; 93.3%; Pred. No. 2.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

4.6%; Score 13.4; DB 1;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 bp DNA
Sequence 1575 from patent US 5646042.
153834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned DNA"
       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
       ·,
                                                                                                                                                                                                               BD241539.1 GI:33051309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          766 CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  I53834.1 GI:2475037
                                                                                                                                                                                                                              JP 2002525127-A/486.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cerecerrerdade 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14; Conservative
       Conservative
                                       762 TAGGCCTCCACTTCT
                                                                        1 resecriceAcrici
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G01N37/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Key
         14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ខ្លួម
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16
                                                                                                                                                             LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 122
                                                                                                                                            BD241539/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                              RESULT 121
                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
       Matches
                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             153834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                        셤
                                         à
                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 14-FEB-2001
PF 05-0CT-1999 JP 2000574546

PR 06-0CT-1998 US 09/167109

I BRENDA F BAKER, LEX M COMSERT, BRETT P MONIA, XIAOXING S XU PC C12N15/09, A61X31/7105, A61X48/00, A61P29/00, A61P35/04, C12N15/00 CC antisense sequence Location/Qualifiers

FH Key Location/Qualifiers
FT source /organism='Artificial Sequence'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Theses it to 17)
Gonsalves, D. and Meng, B.
Rupestris stem pitting associated virus nucleic acids, proteins, and their uses
Patent: US 6093544-A 47 25-JUL-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 17)
Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T.
C-myb ribozymes having 2'-5'-linked adenylate residues
Patent: US 5817796-A 1575 06-OCT-1998;
                                                                                                                                                                                                                                                  Score 13.6; DB 1; Length 20; Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.6%; Score 13.4; DB 1; Length 17; 93.3%; Pred. No. 2.4e+02;
                                                                                                            /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
4.6%; Score 13.4; DB 1; Length 1
Best Local Similarity 93.3%; Pred. No. 2.44+02;
Matches 14; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                    4; Indels
                                                                                                                                                                             /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                        AKU46/182
Sequence 1575 from patent US 5817796.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 47 from patent US 6093544.
                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
                                                                                                                                                                                                                                                                                                                      800 GAGCTCTCCTCCAACTCAGG 819
                                                                                                                                                                                                                                                                                                                                                     20 GAGATGGCCTCCAGCTCAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR104193.1 GI:12816901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR046782.1 GI:5968247
                                                                                                                                                                                                                                                  4.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            802 GCTCTCCTCCAACTC 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15
                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 80.03
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTCTCCTCGAACTC
                                                                                                                                                                . 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR046782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 120
AR104193
                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                          AR046782
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
```

SOURCE

셤

```
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                      1
Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shannon, M.
                                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
ORGANISM
                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                             RESULT 126
AX531605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 127
AX531609
                                                                                                                                                                                                                                                                                                  DEFINITION
REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                  PAT 20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 12-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 10-SEP-2001
                                                                                                                                                                                             1 (bases 1 to 17)
Gonsalves,D. and Meng,B.
Rupestris stem pitting associated virus nucleic acids, proteins, and their uses
Patent: US 6399308-A 47 04-JUN-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.

1 (bases 1 to 17)
Gonsalves, D. and Meng, B.
Patent: US 6395490-A 47 28-MAY-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                        Query Match
4.6%; Score 13.4; DB 1; Length 17;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 4.6%; Score 13.4; DB 1; Length 17; Best Local Similarity 93.3%; Pred. No. 2.4e+02; Matches 14; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX227690 17 bp RN
Sequence 1062 from Patent WO0157206.
AX227690
                                                                                              AR211417 17 bp
Sequence 47 from patent US 6399308.
AR211417
                                                                                                                                                                                                                                                                                     /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 47 from patent US 6395490.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .17
/organism="unknown"
                                                                                                                                   AR211417.1 GI:21514733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR371531.1 GI:34608469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX227690.1 GI:15556831
          802 GCTCTCCTCCAACTC 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                           762 IAGGCCICCACTICT 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          762 IAGGCCTCCACTTCT 776
                        1 GCTCTCCTCGAACTC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 TGGGCCTCCACTTCT 15
                                                                                                                                                                                                                                                                                                                                                                                               1 redecerceactrer 15
                                                                                                                                                                       Unknown.
Unclassified.
                                                                                                                                                      .
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX227690/c
                                                                        RESULT 123
                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                   AR211417
LOCUS
                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR371531
                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                 g
                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 22-NOV-2002
Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                              ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
                                                                                                                                                                                                                         Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 17;
                               linear
                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                     Query Match

4.6%; Score 13.4; DB 1;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

4.6%; Score 13.4; DB 1;
Best Local Similarity 93.3%; Pred. No. 2.4e+02;
Matches 14; Conservative 0; Mismatches 1;
                                                                                                                                   /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human posh-like protein 1
Patent: EP 1239051-A 1114 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Audimou,...
Human posh-like protein 1
Patent: EP 1239051-A 1118 11-SEP-2002;
Acomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1114 from Patent EP1239051. AXS31605.1 GI:25255000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1118 from Patent BP1239051. AX531609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX531609.1 GI:25255008
                                                                                                                                                                                                                                                                                                    798 AAGAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            744 GTAGGGTCCCAGGGT 758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 GTAGGGGCCCAGGGT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                         16 AAAAGCTCTCCTCCA 2
```

PAT 14-FEB-2001

```
Unclassified.

1 (bases 1 to 18)

Diamandis.E., Dunn,J.M. and Stevens,J.K.

Method, reagents and kit for diagnosis and targeted screening for P53 mutations

Petent: US 555283.A 29 03-8EP-1996;
                                                                                                                                                                                                                                     I (bases I to 18)
Diamandis,E., Dunn,J.M. and Stevens,J.K.
Method, reagents and Kit for diagnosis and targeted screening for p53 mutations
Patent: US 6071726-A 29 06-JUN-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match

4.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.6%; Score 13.4; DB 1; Length 18; 93.3%; Pred. No. 2.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 18)
Baker,B.F., Cowsert,L.M., Monia,B.P. and Xu,X.S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 85 from patent US 6399297.
AR211172.1 GI:21514424
                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18 bp 1
Sequence 29 from patent US 5552283.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .18
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                         AR097405 18 bp 1
Sequence 29 from patent US 6071726.
AR097405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                             AR097405.1 GI:12806135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   751 CCCAGGGTCCCTAGG 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     751 CCCAGGGTCCCTAGG 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   I25710.1 GI:1605580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15 cccadderccccade 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15 cccaedercccaes 1
17 TATTTTCTTCTGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 93.33
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
Unclassified.
                                                                                                                                                                                                                         Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 132
AR211172
LOCUS
                                                                                                         DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                     RESULT 130
AR097405/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              [25710/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                             TITLE
                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 25-JUN-2003
                                                                                                                                                                                                                         PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                     Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025277-A 3365 27-WAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.6%; Score 13.4; DB 1; Length 17; 93.3%; Pred. No. 2.4e+02; artive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.6%; Score 13.4; DB 1; Length 17; 93.3%; Pred. No. 2.4e+02; tive 0; Mismatches 1; Indels
                 Query Match 4.6%; Score 13.4; DB 1; Length 17; Best Local Similarity 93.3%; Pred. No. 2.4e+02; Matches 14; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                Sequence 3365 from Patent W003025177. AX737775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Parent: WO 03040369-A 4106 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX760785
Sequence 4106 from Patent WO03040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
                                                                                                                                                                                                                                                                           AX737775.1 GI:30517063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX760785.1 GI:32255401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   832 TCTTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    878 TCCTGAGATGCACTT 892
                                                                                           746 AGGGTCCCAGGGTCC 760
                                                                                                                1 AGGGCCCAGGGTCC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 recreasersearr 17
                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best_Local Similarity 93.3
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 14; Conservi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX760785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                       DEFINITION
ACCESSION
                                                                                                                                                                                 RESULT 128
AX737775
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX760785/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
```

ACCESSION VERSION KEYWORDS SOURCE

QD

JOURNAL

ò

Gaps

; 0

AUTHORS TITLE

JOURNAL

FEATURES

REFERENCE

VERSION KEYWORDS

PAT 07-0CT-1996

linear

0

Gaps

ö

PAT 20-JUN-2002

linear

à

```
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR141671.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                             RESULT 135
BD224950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 136
AR141671
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                  -P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Structural and funcotional conservation of the C. Elegans clock gene clk-1.
BD008778
JP 2001502181-A/8.
                                                                                                                                                 ö
                                                                                                                                                                                                                                                                               PAT 06-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hekimi, S., Bwbank, J., Barnes, T. and Lakowski, B. Structural and funcotional conservation of the C. Elegans clock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60/033196 PI
BERNARD
                                                                                                                                                                                                                                                                                                                                                                                                            Wilson, W.D., Boykin, D. and Tidwell, R.R.
Diamidine compounds as dna minor groove binders
Patent: WO 0146175—A 2 2 SUUN-2001;
The University of North Carolina at Chapel Hill (US); GEORGIA
STATE UNIVERSITY RESEARCH FOUNDATION, INC. (US)
                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
Antisense modulation of expression of tumor necrosis factor receptor-associated factors (TRAFs)
Patent: US 6399297-A 85 04-JUN-2002;
                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .18
/organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
/note="synthetic construct, oligonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
4.6%; Score 13.4; DB 1; Length 18;
Best Local Similarity 93.3%; Pred. No. 2.5e+02;
Matches 14; Conservative 0; Mismatches 1; Indels
                                                                                                                   4.6%; Score 13.4; DB 1; Length 18; 93.3%; Pred. No. 2.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent: JP 2001502181-A 8 20-FBB-2001;
MCGILL: UNIVERSITY
OS Unidentified
PN JP 2001502181-A/8
PD 12-0C11997 JP 1998518750
PF 21-0CT-1997 JP 60/028977,18-DEC-1996 US
PR 21-CT-1996 US 60/028977,18-DEC-1996 US
LAKOWSKI
                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                              0; Mismatches
                                                          1 . 18
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                              AX180399 18 bp Sequence 2 from Patent WO0146175. AX180399
                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                         AX180399.1 GI:15132336
                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                            770 CACTICTGAGGGCAG 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     723 TGACTCTGGTCATAG 737
                                                                                                                                                                                                1 CACTTGTGAGGGCAG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4 TGACTCTCGTCATAG 18
                                                                                                                                 Best_Local Similarity 93.3
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unidentified
unclassified.
1 (bases 1 to 18)
                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 134
BD008778/c
                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                          JOURNAL
                                                                                                                                                                                                                                                    RESULT 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                           FEATURES
                                                                                                                                                                                                                                                                  AX180399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                 LOCUS
```

ð

g

```
BD224950.1 GI:33034720

JP 2002526095-A/85.

Synthetic construct

Synthetic construct

artificial sequences.

El (Dasses I to 18)

Baker, B.F., Cowsert, L.M., Monia, B.P. and Xu, X.S.

Antiseanse modulation of expression of tumor necrosis factor receptor-associated factor (TRAF)

L Patent: JP 2002526095-A 85 20-AUG-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence
PN D 20-AUG-2002

PP 05-OCT-1999 JP 2000574546

PR 06-OCT-1999 JP 2000574546

PR 06-OCT-1999 JP 2000574546

PR 06-OCT-1999 UP 2000574546

PR 06-OCT-1999 UP 2000574546

PR 06-OCT-1998 US 09/16/109

PR BRENDA F BAKER, LEX M COWSERT, PRETT P MONIA, XIAOXING S XU PC CI2NIS/09, AGIRSIA/TIAOXING S AU PC AUTINES/09, AGIRSIA/TIAOXING S AU PC AUTINES/09, AGIRSIA/TIAOXING S AUTINES/09, AGIRSIA/TIAOXI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 08-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD224950 18 bp DNA linear PAT 17-Antisense modulation of expression of tumor necrosis factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.6%; Score 13.4; DB 1; Length 18; Best Local Similarity 93.3%; Pred. No. 2.5e+02; Matches 14; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.6%; Score 13.4; DB 1; Length 18; Best Local Similarity 93.3%; Pred. No. 2.5e+02; Matches 14; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
C12Q1/68, A01K67/027, A61K35/00//C07K14/435
Strandedness: Single;
Topology: Linear;
                                                                                                                                                                                      1. .18
/organism='Unidentified'.
Location/Qualifiers
                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1..18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                receptor-associated factor (TRAF).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR141671 20 bp
Sequence 2 from patent US 6146871.
AR141671
                                                                                                                                                                                                                                                                                                                          1. .18
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GI:15101187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               827 GIGICICITITICITC 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    770 CACTICIGAGGCAG 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 cactrereasescas 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18 GIGICCTTTTCTTC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
```

```
18 GTGGCTCTGGTCATA 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 139
E40739
                                                                                                                                                                                                                                                                                                                                                               Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 17-JUL-2003
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 20)

Bennett, C. Frank. and Vickers, T.A.

Boljogoucileotide compositions and methods for the modulation of the expression of BY protein Patent: US 6319906-A 126 20-NOV-2001;
Unclassified.

(bases 1 to 20)

(arcia Lopez,J.Luis., Cortes Rubio,E., Guisan Seijas,J.Manuel.,
Barredo Fuente,J.Luis., Diez Garcia,B., Collados de la Vieja,A.,
Vitaller Alba,A. and Salto Maldonado,F.
Process for modifying the enzyme 7.beta.-(4-carboxybutanamide)
cephalosporinacylase and purifying said enzyme in a single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JS 60/120680,23-APR-1999 US 09/298733 PR 60/149639,23-SEP-1999 US 60/155686 PR
                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and Rapiejko, P.
                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   bDV42897 20 bp DNA linear Secreted proteins and polynucleotides encoding them. BD242897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.6%; Score 13.4; DB 1; Length 20; 93.3%; Pred. No. 2.8e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Truction sequences.

1 (bases 1 to 20)
Valenzuela, D., Yuan, O., Hoffman, H., Hall, J. and Rapi Secreted proteins and polynucleotides encoding them Patent: JP 2002536973-A 48 05-NOV-2002;
ALPHAGENE INC
OS Artificial Sequence
                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                      Query Match

4.6%; Score 13.4; DB 1;
Best Local Similarity 93.3%; Pred. No. 2.8e+02;
Matches 14; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 126 from patent US 6319906. AR178080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                      /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                 chromatographic step
Patent: US 6146871-A 2 14-NOV-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PN JP 2002536973-A/48
PD 05-NOV-2002
PF 18-FEB-2000 JP 2000599860
17-AUG-1999 US 60/12068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD242897.1 GI:33052667
JP 2002536973-A/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR178880.1 GI:20220018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            765 GCCICCACTICIGAG 779
                                                                                                                                                                                                                                                                                                           918 ATCATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTCCACTTCTGAG 16
                                                                                                                                                                                                                                                                                                                                             2 Arcarcaccaccarc 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 138
BD242897/c
                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                               RESULT 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                   REFERENCE
                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                  AR178880
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
```

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 31-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Serizawa, N., Haruyama, H., Takahashi, W., Nakahara, K. and Yonehara, S. Antihuman Fas humanized antibody-containing antirheumatic
Patent: JP 2000154149-A 110 06-JUN-2000;
SANKYO CO LTD
01-OCT-1999 US 60/157247,29-NOV-1999 US 60/167823 PR 29-NOV-1999 US 60/167822,15-FEB-2000 US 60/182711 PI DARIO VALENZUELA,OLIVE YUAN,HEIDI HOFFMAN,JEFF HALL,PETER PI RAPIEJKO PC CLANIS/09,A61R38/00,A61P3/10,A61P5/14,A61P1/00,A61P11/06, PC
                                                                            A61P19/02,
PC A61P21/04,A61P25/14,A61P27/02,A61P29/00,A61P31/04,A61P31/10,
PC A61P21/12,
PC A61P31/12,
PC A61P31/18,A61P31/20,A61P31/22,A61P37/00,A61P37/06,C07K14/435,
PC C12N5/10,
PC C12N19/34//(C12N19/34,C12R1:91),C12N15/00,C12N5/00,A61K37/02
PC C12P19/34//(C12P19/34,C12R1:91),C12N15/00,C12N5/00,A61K37/02
PF Key
Location/Qualifiers
FT source
//organism='Artificial Sequence'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20 bp DNA linear PAT 31
Antihuman Fas humanized antibody-containing antirheumatic.
E40739
                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.6%; Score 13.4; DB 1; Length 20; 33.3%; Pred. No. 2.8e+02;
                                                                                                                                                                                                                                                               /organism='Artificial Seguence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                Match 4.6%; Score 13.4; DB 1; Local Similarity 93.3%; Pred. No. 2.8e+02; es 14; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                               /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 93.3%; Pred. No. 2.8e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   722 GIGACICIGGICATA 736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E40739.1 GI:18627328 JP 2000154149-A/110.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        710 AGTCCCAGGAGAGTG 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6 ACTCCCAGGAGAGTG 20
```

```
/mol_type="unassigned DNA"
                                         Best Local Similarity
                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                   Unknown.
                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                              RESULT 143
AR292797/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 144
AX601037/c
LOCUS
                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 145
BD089204
                                                       Matches
                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                        LOCUS
                                                                                                         an
                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                PAT 20-JUN-2002
                                                                                                                                                                                                                                                              o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                               PAT 20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 20)
Popoff, I. and Wyatt, J.
Antisense modulation of damage-specific DNA binding protein 2, p48
                                                                                                               1 (bases I to 20)
Baker, B.F., Bennett, C.Frank. and Wyatt, J.
Antisense modulation of inhibitor of DNA binding-1 expression
Patent: US 6372433-A 80 16-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 20)
Baker, B.F., Bennett, C.Frank, and Wyatt, J.
Antisense modulation of inhibitor of DNA binding-1 expression
Patent: US 372433-A 81 16-APR-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                  4.6%; Score 13.4; DB 1; Length 20; 93.3%; Pred. No. 2.8e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.6%; Score 13.4; DB 1; Length 20; Best Local Similarity 93.3%; Pred. No. 2.8e+02; Matches 14; Conservative 0; Mismatches 1; Indels
                linear
                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                               DNA
         Sequence 80 from patent US 6372433.
AR206660.1 GI:21505330
                                                                                                                                                                                            /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 bp
Sequence 36 from patent US 6379960.
AR208118
AR208118.1 GI:21508051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    expression
Patent: US 6379960-A 36 30-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                          AR206661
Sequence 81 from patent US 6372433.
AR206661.1 GI:21505331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
1. .20
/organism="unknown"
                                                                                                                                                                                                                                                                                    829 GICTCTTTCTTCT 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   829 GICTCTTTTCTC 843
                                                                                                                                                                                                                                                                                                 15 GTCTCATTTCTTCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18 GrereArricate 4
                                                                                                                                                                                                                               Query Match
Best Local Similarity 93.34
Matches 14; Conservative
                                                                                                    Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
                                                                            Unknown.
                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                 RESULT 141
AR206661/c
             LOCUS
                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
AR206660/c
                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 142
AR208118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                            SOURCE
                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
```

```
0
                                                                                                                                                                                                                      PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 17-FEB-2003
                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genetic typing
Patent: WO 02092851-A 132 21-NOV-2002;
ANIMAL HEALTH TRUST (GB) ; The British Horseracing Board (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                  Unclassified.

1 (bases 1 to 20)

1 (bases 1 to 20)

Biallelic markov,I. and Blumenfeld,M.

Biallelic markov for use in constructing a high density disequilibrium map of the human genome

Patent: US 6537751-A 4532 25-MAR-2003;

Location/Qualifiers
                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ouery Match 4.6%; Score 13.4; DB 1; Length 20; Best Local Similarity 93.3%; Pred. No. 2.8e+02; Matches 14; Conservative 0; Mismatches 1; Indels
4.6%; Score 13.4; DB 1; Length 20;
93.3%; Pred. No. 2.8e+02;
tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.6%; Score 13.4; DB 1;
93.3%; Pred. No. 2.8e+02;
ative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="traxon:32630"
/note="Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                  AR292797 20 bp DNI
Sequence 4532 from patent US 6537751.
AR292797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 132 from Patent W002092851. AX601037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Binns, M.M. and Swinburne, J.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX601037.1 GI:28401110
                                                                                                                                                                                                                                                                             AR292797.1 GI:31680081
                                                                               855 TCCTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    826 TGTGTCTTTTCTT 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
artificial sequences.
                                                                                                 2 TCCTGGCTCCAGATG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                760 CCTAGGCCTCCACTT 774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 TGTGTCTCTGTTCTT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 CCTTGGCCTCCACTT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 93.35
Matches 14; Conservative
                                        14; Conservative
```

Page 43

```
misc_feature
                                                                                                                                                                                                                                                                                                                                                                                   Н
  DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 149
AX708556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 148
AX358004/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                 Artificial Sequence
JP 2001321190-A/1448
20-NOV-2001
12-MAR-2001 JP 2001068285
BIICHI SOEDA
C12N15/09,C12N15/09,C12M1/00,C12Q1/68,G01N33/53,G01N33/566, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
    PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                          Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                    Soeda, E.
A method of arraying genome clone
Patent: JP 2001321190-A 1448 20-NOV-2001;
THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEBARCH, YUGENKAISHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 18)
Cohen.D., Chumakov.I. and Blumenfeld.M.
Biallellic markers for use in constructing a high density
disequilibrium map of the human genome
Patent: US 6537751-A 9283 25-MAR-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                         Description of Artificial Sequence: Synthetic DNA FH
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;0
                                                                                                                                                                                                                                                                                                                                                                                                                        4.6%; Score 13.4; DB 1; Length 20; 93.3%; Pred. No. 2.8e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 18;
                                                                                                                                                                                                                                                                                                                             /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.6%; Score 13.2; DB 1; 83.3%; Pred. No. 2.7e+02;
                                                                                                                                                                                                                                                                                                                                                         1...20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18 bp DN.
US 6537751.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
20 bp
A method of arraying genome clone.
BD089204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 9283 from patent
AR297548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             915 ATTATCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ATTGACATCACCACCAAC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR297548.1 GI:31684832
                                         BD089204.1 GI:22634814
                                                  JP 2001321190-A/1448.
synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIGGCIGIGICACII 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            821 TTGGCTGTGTCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .18
                                                                                                                                                                                                                                                                              C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                      GENOTECHS
OS Artif
PN JP 20
PD 20-NO
PF 12-MA
PI BIICH
PC C12N1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR297548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                             CG FG
                                                                                                                                                                                                                                                                                                                   FT
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
  LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 147
                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                TITLE
JOURNAL
                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR297548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                    COMMENT
                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
```

PAT 26-OCT-2001

linear

DNA

18 bp

AX267018

AX267018 LOCUS

```
Mikesell, G.E., Chang, H., Finger, J.N., Yang, G., Lu, P., Zhou, X.D. and
                                                                                                                                                                                                                                                                                                                                                                                                                                             ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 13-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 04-APR-2003
                                                                                                                                     Seidman, M.M. and Majumdar, A.
Establishment of cellular manipulations which enhance
oligo-mediated gene targeting
Patent: WO 0173001-A 7 04-0CT-2001,
THE SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                      1. .2
/note="The residue between C at position 1 and T at
position 2 is pyrene"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peach, R.
B7-related nucleic acids and polypeptides and their uses for
                                                                                                                                                                                                                                                                                                                                                                                                                                             .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .,
0
                                                                                                                                                                                                                                                                                                                                                                                                              18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                          Score 13.2; DB 1;
Pred. No. 2.7e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 13.2; DB 1;
Pred. No. 2.7e+02;
                                                                                                                                                                                                                                                  1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noTe="Synthetic"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/nofe="Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Immunomodulation
Patent: WO 0194413-A 50 13-DEC-2001;
Bristol-Myers Squibb Company (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX358004 18 bp
Sequence 50 from Patent WO0194413.
AX358004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 7 from Patent W002101089. AX708556
Sequence 7 from Patent WO0173001. AX267018
                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                825 CIGIGICICITITICITCI 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   922 TCACCACCACCTCCAGA 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTTCTCTTTTTTCTTCT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX358004.1 GI:18674775
                                      AX267018.1 GI:16515803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                          4.6%;
                                                                     synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18 TCACCATCACACCCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 83.33
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX708556.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
```

·`

Gaps

ö

PAT 29-SEP-1999

```
Specific inhibition of the polymerase chain reaction using a non-extendable oligonucleotide blocker
Patent: US 5849497-A 1 15-DEC-1998;
Location/Qualifiers
                                                                                                                                                                                                                                     Unclassified.

1 (Dases 1 to 19)

Embleron,M.J., Gorchov,G., Jones,P.T. and Winter,G.P.

In situ recombinant PCR within single cells

Patent: US 5830663-A 68 03-NOV-1998;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match
4.6%; Score 13.2; DB 1; Length 19;
Best Local Similarity 83.3%; Pred. No. 2.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 19;
                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 13.2; DB 1; Length 1
Pred. No. 2.9e+02;
0; Mismatches 3; Indels
   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
   3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
   0; Mismatches
                                                                                                                                                                                                                                                                                                                                 1. .19
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 23 from patent US 6071726. AR097399 AR097399.1 GI:12806129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                  AR051418 19 bp
Sequence 68 from patent US 5830663.
AR051418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR065232 19 bp
Sequence 1 from patent US 5849497.
AR065232 GI:5995448
                             778
                                                                                                                                                                                                                                                                                                                                                                                                                                                    752 CCAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      919 TCATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 ccadadrocerredecee 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 rearcecacerrered 1
                                                                                                                                                                              AR051418.1 GI:5974782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.68;
                             761 CTAGGCCTCCACTTCTGA
                                                         1 chagocorcoacororca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 83.34
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 19)
 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Steinman, C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                               DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                     RESULT 152
AR051418
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 153
AR065232/c
LOCUS
                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 154
   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR097399
                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                               ò
                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                           PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antibodies specific for OVCA DNA encoded proteins and methods for their use
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                          Snaidr, J. and Beimfohr, C.
Method for specific, fast detection of threadlike bacteria
Patent: WO 02101089-A 7 19-DEC-2002;
                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tumor development
                                                                                                                                                                                                          Query Match
4.6%; Score 13.2; DB 1; Length 18;
Best Local Similarity 83.3%; Pred. No. 2.7e+02;
Matches 15; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
4.6%; Score 13.2; DB 1; Length 19;
Best Local Similarity 83.3%; Pred. No. 2.9e+02;
Matches 15; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.6%; Score 13.2; DB 1;
83.3%; Pred. No. 2.9e+02;
                                                                                                                1. 18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="teaxon:32630"
/note="Oligonukleotid"
                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gene associated with suppression of
Patent: US 5801041-A 10 01-SEP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent: US 5821338-A 10 13-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .19
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                    19 bp
Sequence 10 from patent US 5801041.
AR037220.
AR037220.1 GI:5955076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 10 from patent US 5821338.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. 19
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                     927 ACCACCCTCCAGAGATT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           761 CTAGGCCTCCACTTCTGA 778
                                                                                                                                                                                                                                                                                        1 ACCTACCTCCAGAGCATT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CTAGCCCTCCACCTCTCA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR048689.1 GI:5971032
synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
Unclassified.
1 (bases 1 to 19)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
1 (bases 1 to 19)
Godwin, A.K.
                                                                                        Vermicon AG (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Godwin, A.K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
VERSION
                                                                                                                        source
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                             RESULT 150
                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 151
                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                             AR037220
                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR048689
                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
```

ô

Gaps

·,

PAT 29-SEP-1999

0

. 0

PAT 14-FEB-2001

rge.res

```
BD093608
                                                                                                                                                                                                                                                                                                                               Atopy
                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                            RESULT 157
AX699170
                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 158
BD093608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 18-MAR-2002
                                                                                                                                                                                                                                                                                                                                           PAT 07-0CT-1996
                                                                                                                                                                                                         ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .19
/note="upstream amplification primer 99-26997 for SEQ 45"
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unclassities.

(bloases 1 to 19)
Diamandis,E., Dunn,J.M. and Stevens,J.K.
Method, reagents and kit for diagnosis and targeted screening for P53 mutations
P53 mutations
Patent: US 5552283-A 23 03-SEP-1996;
Patent: Location/Qualifiers
Unclassified.

1 (bases 1 to 19)
Diamandis, E., Dunn, J.M. and Stevens, J.K.
Method, reagents and kit for diagnosis and targeted screening for p53 mutations
p53 mutations
Patent: US 6071726-A 23 06-JUN-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cohen, D., Blumenfeld, M., Chumakov, I., Abderrahim, H. and Bihain, B. Obesity associated biallelic marker maps
Patent: WO 0206525-A 216 24-JAN-2002;
GENSET (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                         ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.6%; Score 13.2; DB 1; Length 19; 83.3%; Pred. No. 2.9e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                       ch
4.6%; Score 13.2; DB 1; Length 19;
1 Similarity 83.3%; Pred. No. 2.9e+02;
15; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .19
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xxef="taxon:9606"
1. .19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 216 from Patent WO0206525.
                                                                                                                1. .19
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                           125704 19 bp Sequence 23 from patent US 5552283.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               816 CAGGGTTGGCTGTCTC 833
                                                                                                                                                                                                                                     816 CAGGGTTGGCTGTGTCTC 833
                                                                                                                                                                                                                                                        CAGGGTTGGAAGCGTCTC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGGTTGGAAGCGTCTC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX378427.1 GI:19574280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                       I25704.1 GI:1605574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                          Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                          I25704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        primer bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 156
AX378427/c
LOCUS
                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                             RESULT 155
125704
                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                          REFERENCE
                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
```

```
PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Artificial Sequence
Wo 011351-A/11
01-MAR-2001
21-AUG-2000 WO 2000JP005590
19-AUG-1999 JP 99P 232966
YUKIO KATO, KATSUMI FUJIWOTO
A61K45/00, A61K38/40, A61K48/00, A61K31/7088, A61K35/32, A61P19/02, C07K14/47,
                               .;
0
                                                                                                                                                           PAT 29-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                             4.6%; Score 13.2; DB 1; Length 19; 83.3%; Pred. No. 2.9e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 19;
4.6%; Score 13.2; DB 1; Length 19; 83.3%; Pred. No. 2.9e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                        Zhang, Y., Moffatt, M., Cookson, W. and Tinsley, J.O.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1;
                                                                                                                                                                                                                                                                                                                                                                         /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                 Patent: WO 03000727-A 111 03-JAN-2003;
ISIS INNOVATION LIMITED (GB)
Location/Qualifiers
                                                                                                                                                          AX699170 19 bp Di
Sequence 111 from Patent WO03000727.
AX699170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 13.2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       723 TGACTCTGGTCATAGGAC 740
                                                           826 TGTGTCTTTTTCTTCTC 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 reacretregerraggae 18
                                                                                                                                                                                                   AX699170.1 GI:29499820
                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.68;
                                                                                     18 rargagicirricircic
  Query Match 4.6
Best Local Similarity 83.3
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 15; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
```

```
Query Match
                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                              RESULT 162
AR100299
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
ORGANISM
                DEFINITION
                                                                                ORGANISM
                                                                                                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 163
                               ACCESSION
                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                        KEYWORDS
                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR126600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           l (bases 1 to 20)
Bergeron, M.G., Picard, F.J., Ouellette, M. and Roy, P.H.
Bergeron, M.G., Picard, F.J., Ouellette, M. and Roy, P.H.
Species-specific and universal DNA probes and amplification primers
to rapidly detect and identify common bacterial pathogens and
associated antibioric resistance genes from clinical specimens for
routine diagnosis in microbiology laboratories
Patent: US 5994066-A 126 30-NOV-1999;
Location/Qualifiers
                            ö
                                                                                                                                                  PAT 07-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                   o.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 07-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 08-SEP-2000
                                                                                                                                                                                                                       unidentified
unclassified.
1 (bases 1 to 20)
Shipbey,J., Clark,J. and Cooper,C.
MATERIALS AND METHONS RELATING TO THE DIAGNOSIS AND PROPHYLACTIC
AND THERAPEUTIC TREATMENT OF PAPILLARY RENAL CELL CARCINOMA
PATERI. MO 9806871-A 29 19-FEB-1998;
SHIPLEY JANET (GB)
                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                      4.6%; Score 13.2; DB 1; Length 20; llarity 83.3%; Pred. No. 3.1e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                            Indels
                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
i. No. 2.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 13.2; DB 1;
Pred. No. 3.1e+02;
0; Mismatches 3;
                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ak089367 20 bp Di
Sequence 126 from patent US 5994066.
                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned DNA"
                                                                                                                                               A69620 20 bp
Sequence 29 from Patent WO9806871.
A69620
                                                                                                                                                                                                                                                                                                                                                                   /organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
              Pred.
                                                     815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              919 TCATCACCACCACCTCC 936
                                                                             2 AAGACCTCCCTCCATCT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR089367.1 GI:10016124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rcarcccaccrrcrcc
            83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 83.3%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           822 IGGCIGIGICICITICI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19 TrGCrGrGrCrAGTTCT
                                                    798 AAGAGCTCTCCTCCAACT
                                                                                                                                                                                        A69620.1 GI:4774243
                          15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                  unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR089367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR089367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR093567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 161
AR093567/c
LOCUS
                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR089367/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                      RESULT 159
                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                   A69620/c
                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                 LOCUS
                                                                             Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
```

```
l (bases 1 to 20)
Bergeron,M.G., Ouellette,M. and Roy,P.H.
Species specific and universal DNA probes and amplification primers to rapidly detect and indentify common bacterial pathogens and associated antibiotic resistance genes from clinical specimens for routine diagnosis in microbiology laboratories
Patent: US 6001564-A 126 14-DEC-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (Dases 1 to 20)
Baker, B.F., Bennett, C.Frank., Butler, M.M. and Shanahan, W.R. Jr. Antisense oligonucleotide modulation of tumor necrosis factor-alpha. (TNF-, alpha.) expression
Patent: US 6080890-A 30 27-JUN-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                               4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 3.1e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 13.2; DB 1;
Pred. No. 3.1e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 20)
Dean, N. M. and Cowsert, L. M.
Antisense modulation of daxx expression
Patent: US 6180353-A 29 30-JAN-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
Sequence 126 from patent US 6001564.
                                                                                                                                                                                                                                                                                                                 1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR126600 20 bp 1
Sequence 29 from patent US 6180353.
AR126600.1 GI:14113193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 Dp
Sequence 30 from patent US 6080580.
AR100299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 919 TCATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         759 CCCTAGGCCTCCACTTCT 776
                       AR093567
AR093567.1 GI:10020316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR100299.1 GI:12810747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 CCCTAAGCCCCCAATTCT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 rchrcccaccrrcrcc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 83.3%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                          15; Conservative
                                                                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 15; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR100299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
```

```
FFECE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C
                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 167
BD247745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
JOURNAL
                  ACCESSION
                                                                                                          AUTHORS
                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                          TITLE
                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD227827 27827 20 bp DNA linear PAT 17-JUL-2003 Antisense oligonucleotide regulation of expression of tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                      ö
                                                                                                                                                                                         PAT 16-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 08-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 20)
Baker, B.F., Bennett, C. Frank., Butler, M.M. and Shanahan, W.R. Jr. Antisense oligonucleotide modulation of tumor necrosis factor-(.alpha.) (TMF-.alpha.) expression
Patent: US 6228642-A 30 08-MAY-2001;
                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                             1 (bases 1 to 20)
Dean, N.M., Karras, J.G. and McKay, R.
Antisense modulation of interleukin-5 signal transduction
Patent: US 6136603-A 32 24-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 3.1e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                         Length 20
                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                   4.6%; Score 13.2; DB 1;
83.3%; Pred. No. 3.1e+02;
.ve 0; Mismatches 3;
                                         Query Match
4.6%; Score 13.2; DB 1;
Best Local Similarity 83.3%; Pred. No. 3.1e+02;
Matches 15; Conservative 0; Mismatches 3;
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                        20 bp | Sequence 93 from patent US 6136603.
                                                                                                                                                                                                                                                                                                                                                                 1. .20
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 30 from patent US 6228642.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                759 CCCTAGGCCTCCACTTCT 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        801 AGCTCTCCTCCAACTCAG 818
                                                                                              810 CCAACTCAGGGTTGGCTG 827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCTAAGCCCCCAATTCT 19
                                                                                                                3 CCACCTCAGGGTGGTCTG 20
                                                                                                                                                                                                                    AR136290
AR136290.1 GI:14476962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 AGCTGGCCTCGAACTCAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR149954
AR149954.1 GI:15114545
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 83.3%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                       Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best_Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR149954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 166
                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                     JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                               RESULT 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR149954
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD227827
                                                                                                                                                                             AR136290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                              à
```

```
PAT 17-JUL-2003
                                                                                                                                                                                                                                            Increases factor—alpha (TMR-alpha)

In Patent: JP 2002526125-A 30 20-AUG-2002;

ISIS PHARMACEUTICALS INC

OS Artificial Sequence

PN JP 2002526125-A/30

PD 20-AUG-2002

PD 20-AUG-2002

PP 05-OCT-1999 US 09/166186,18-MAY-1999 US 09/313932 PI

BRENDA F BAKER, FRANK C BENNETT, MADELINE M BUTLER, WILLIAM J PI

SHANHAN JR

PC C12N15/09, A61K31/7115, A61K31/712, A61K31/7125, A61K48/00, A61P1/PC

C0, A61P1/16,

PC A61P1/16,

PC COTAL1/02,

PC COTAL1/02,

PC COTAL1/02,

PC COTAL1/02,

PC COTAL1/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C12N15/09, A61K31/7115, A61K31/712, A61K31/7125, A61K48/00, A61P1/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-NOV-2002
17-MAR-2000 JP 2000608790
26-MAR-1999 US 09/280799
NICHOLAS M DEAN, JAMES G KARRAS, ROBERT MCKAY
CI2N15/09,A61K31/711,A61K48/00,A61P11/06,A61P29/00,A61P35/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
necrosis factor-alpha (TNF-alpha).
BD227827
BD2278271
GI:33037597
BD2278271.
GI:33037597
SYNThetic construct
synthetic construct
synthetic construct
artificial sequences.
In to laser 1 to 20)
Baker, B.F., Bennett, F.C., Butler, M.M. and Jr.W.J.S.
Antisense oligonucleotide regulation of expression of tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD247745 20 bp DNA linear PAT 17
Antisense modulation of interleukin-5 signal transduction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dean,N.M., Karras,J.G. and Mckay,R.
Mathisense modulation of interleukin-5 signal transduction
Patent: JP 2005539846-A 93 26-NOV-2002;
ISIS PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ce 1. .20
/organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism='Artificial Sequence' Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Description of Artificial Sequence:Synthetic
Key Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 13.2; DB 1;
Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1...20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A61P43/00, C12N5/02, C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             759 CCCTAGGCCTCCACTTCT 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Artificial Sequence
JP 2002539846-A/93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCTAAGCCCCCAATTCT 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD247745
BD247745.1 GI:33057515
JP 2002539846-A/93.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         artificial sequences.
1 (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
```

```
23-MAR-1999 JP 1999078572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OSHIMURA,
PI ISAO ISHIDA
                                                       ISAO ISHIDA
                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
PF 23-M2
PR KAZUN
OSHIMURA,
PI ISAO
PC AOLKE
                                                                                                                                                                                                                                                                                                                                                                                  E38872
                                                                                                  FF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OS
PP
PP
PR
PI
                                                                                                                                                                                                                                                                                                                                                                               LOCUS
DEFINITION
ACCESSION
                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                     RESULT 170
E38872/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 171
140269/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                           PAT 18-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 18-JUN-2001
                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and Isao, I.
                                                                                                  ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JP 1999113756-A/14.

Synthetic construct
artificial sequence.

I (bases 1 to 20)
Kazuma, T., Hitcshi, Y., Kazumori, H., Mitsuo, O. and Isao, I.
Chimeric animal and method for constructing the same Patent: JP 199931376-A 14 16-NOV-1999;
KIRIN BERWERY CO LTD
OS Artificial Sequence
EN JP 1999313576-A/14
ED 16-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ce 1. .20
/organism≃'Artificial Sequence'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 bp DNA linear P.
Chimeric animal and method for constructing the same.
E38864
                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 20;
                                                                                                                                                                                                                          linear
                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                      synthetic construct
artificial sequences.

I (bases 1 to 20s)
Toyoteru,M. and Toshihiko,K.
Method for distinguishing H.A.A allele type Patent: UP 199216000-A 8 10-AUG-1999;
SHIONOGI & CO ITD
OS Artificial Sequence
PN UP 1999216000-A/8
PD 10-AUG-1999
PF 27-OCT-1998 UP 1998305892
PR 27-OCT-1998 UP 1998305892
PR 27-OCT-1998 UP 1998305892
PR 27-OCT-1998 UP 1998305892
PR TOYOTERU MORIBE, TOSHIHIKO KANESHIGE
PC C12Q1/68,G01N27/447//C12N15/09
CC FH Key
Location/Qualifiers
FT source
//organism='Artificial Sequence
                                                                                                                                                                                                                          E35231 20 bp DNA 1
Method for distinguishing HLA-A allele type.
E35231 GI:13018976
                                                                   Score 13.2; DB 1;
Pred. No. 3.1e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.6%; Score 13.2; DB 1;
83.3%; Pred. No. 3.1e+02;
ative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
1...20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db.xref="taxon:32630"
                                                                                                                            818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         929 CACCCTCCAGAGAATTTT 946
                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 CACCCTCCAGATGATGTT 20
                                                                   Query Match
Best Local Similarity 83.3%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E38864.1 GI:13017612
                                                                                                                                              3 AGCTGGCCTCGAACTCAG
                                                                                                                           801 AGCTCTCCTCCAACTCAG
                                                                                                                                                                                                                                                                                JP 1999216000-A/8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 83.3
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 169
E38864/c
                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                               RESULT 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                             E35231
LOCUS
                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                            à
```

```
PAT 13-MAY-1997
                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 18-JUN-2001
  MITSUO
                                                        A01K67/027, C12N5/10, C12N15/02, C12P21/08, C12N5/00, C12N15/00 CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A01K67/027,C12N5/10,C12N15/02,C12P21/08,C12N5/00,C12N15/00 CC
                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
ΡI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KAZUMA TOMIZUKA, HITOSHI YOSHIDA, KAZUNORI HANAOKA, PI
                                                                                                                                                                                                                                                                                                                 .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
KAZUMA TOMIZUKA, HITOSHI YOSHIDA, KAZUNORI HANAOKA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chimeric animal and method for constructing the same.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic construct
synthetic construct
artificial sequences.
I (bases 1 to 20)
Kazuma,T., Hitoshi,Y., Kazunori,H., Mitsuo,O. and Isa
Chimeric animal and method for constructing the same
Patent: JP 1999313576-A 22 16-NOV-1999;
KIRIN BREWERY CO LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism='Artificial Sequence'.
Location/Qualifiers
                                                                                                                                   /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                           Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                         Score 13.2; DB 1; Length 2
Pred. No. 3.1e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 13.2; DB 1;
Pred. No. 3.1e+02;
                                                                                                                                                                        1..20
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .20
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20 bp 1
Sequence 27 from patent US 5620847.
140269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Artificial Sequence
JP 1999313576-A/22
16-NOV-1999
23-MAR-1999 JP 1999078572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . 20
                                                                                                                                                                                                                                                                                                                                                  765 GCCTCCACTTCTGAGGGC 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            765 GCCTCCACTTCTGAGGGC 782
                                                                                                                                                                                                                                                                                                                                                                          18 GCTTCGTCTTCTGAGGGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18 Gérrégrériergagge 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E38872.1 GI:13017620 JP 1999313576-A/22.
                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 83.3%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 83.3%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
DEFINITION
ACCESSION
```

ö

Gaps

```
PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 12-JUN-2003
                                                                                                                             PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
Unknown.
Unclassified.

1 (bases 1 to 20)

1 (bases 1 to 20)

Biallelic markers for use in constructing a high density disequilibrium map of the human genome patent: US 6537751-A 5296 25-MAR-2003;

Location/Qualifiers
                                                                                                                                                                                                                             Unclassified.

1 (bases 1 to 20)

Cohen,D., Chumakov,I. and Blumenfeld,M.

Biallelic markers for use in constructing a high density
disequilibrium map of the human genome
Patent: 105 (537751-A 4564 25-MAR-2003;
Location/Qualifiers
·.
                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 3.1e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                     Query Match 4.6%; Score 13.2; DB 1; Length 20; Best Local Similarity 83.3%; Pred. No. 3.1e+02; Matches 15; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
 Indels
3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 bp DNA Sequence 7138 from patent US 6537751. AR295403 AR295403.1 GI:31682687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 bp DNi
Sequence 5296 from patent US 6537751.
                                                                                                                            20 bp DNN
Sequence 4564 from patent US 6537751.
AR292829
Mismatches
                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                    1. .20
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 888 CACTTACTTCTCAGCTTC 905
                                                                                                                                                                                                                                                                                                                                                                                                                                               917 TATCATCACCACCACCT 934
                            734
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR293561.1 GI:31680845
                                                                                                                                                                       AR292829.1 GI:31680113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 TATCATCABAACCACTCT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 CACTAACTICTIAGCATC
                            717 GGAGAGTGACTCTGGTCA
                                                        19 GGAGATTGACTATGGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 83.3%,
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                  Unknown.
 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 176
AR295403/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                  ORGANISM
                                                                                                                 AR292829/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                 RESULT 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
 Matches
                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
SOURCE
                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR293561
                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Db
                                                  g
                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 20-DEC-2002
                                                                                                                                                                                                                                               ·,
                                                                                                                                                                                                                                                                                                                                                                            PAT 07-0CT-1997
                                               Unclassified.

1 (bases 1 to 20)
Greisen, K.S. and Leong, D.U.
Methods and reagents for detection of bacteria in cerebrospinal fluid
                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.

1 (bases 1 to 20)

Leong, D.U.

Method and probes for identifying bacteria found in blood Patent: US 5635348-A 2 03-UN-1997;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 4.6%; Score 13.2; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 3.1e+02;
Matches 15; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                 Query Match
4.6%; Score 13.2; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 3.1e+02;
Matches 15; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.

1 (bases 1 to 20)
Popoff, I and Cowsert, L.M.
Antisense modulation of PARP expression
Patent: US 6451602-A 81 17-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                               Patent: US 5620847-A 27 15-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 81 from patent US 6451602.
                                                                                                                                                                                    /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                        20 bp
Sequence 2 from patent US 5635348.
I44547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="genomic DNA"
                                                                                                                                     Location/Qualifiers
1..20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .20
/organism="unknown"
                                                                                                                                                                          /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 921 ATCACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                           921 ATCACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR230821.1 GI:27271608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 ATCCCCACCTTCCTCCAG 3
                                                                                                                                                                                                                                                                                                20 ATCCCCACCTTCCAG 3
                                                                                                                                                                                                                                                                                                                                                                                                                      144547.1 GI:2469260
  GI:2082561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
  I40269.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 173
AR230821/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                RESULT 172
144547/c
                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                      REFERENCE
                                                                                        AUTHORS
  VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                             FEATURES
                                                                                                     TITLE
                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dp
Dp
```

.. 0

Gaps

0;

Gaps

ö

Gaps

.; 0

PAT 18-DEC-2003

```
1 (bases 1 to 20)

Tomizuka, K., Yoshida, H., Hanaoka, K., Oshimura, M. and Ishida, I.

Thimeric mice that are produced by microcell mediated chromosome
transfer and that retain a human antibody gene
Patent: US 6632976-A 14 14-0CT-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (Dases 1 to 20)

Tomizuka,K., Yoshida,H., Hanaoka,K., Oshimura,M. and Ishida,I.
Chimeric mice that are produced by microcell mediated chromosome transfer and that retain a human antibody gene
Patent: US 6632976-A 22 14-0CT-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 20;
                                                                                                                                             linear
      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 4.6%; Score 13.2; DB 1; Length 2 Best Local Similarity 83.3%; Pred. No. 3.1e+02; Matches 15; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
      3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 13.2; DB 1;
Pred. No. 3.1e+02;
                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                               AR409526 20 bp
Sequence 14 from patent US 6632976.
AR409526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR409534 20 bp Sequence 22 from patent US 6632976.
AR409534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX326961 20 bp 1
Sequence 157 from Patent W00178894.
                                                                                                                                                                                                                                                                                                                                                            1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
    .,
                                 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     765 GCCTCCACTTCTGAGGGC 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  765 GCTCCACTTCTGAGGG 782
                                                                                                                                                                                       AR409526.1 GI:40160499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR409534.1 GI:40160507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:18097672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 écricercircidades 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 derregrerrerendades
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 83.3%;
Matches 15; Conservative
                                                                cecaegreccaagaecec
                                 788 CTCTGGTGCCAAGAGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
    Conservative
                                                                                                                                                                                                                                    Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX326961
AX326961.1
                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
    15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                          AR409526/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 181
AX326961/c
LOCUS
                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 180
AR409534/c
   Matches
                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                 à
                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                    ·,
                                                                                                                                                                                                                                                                                                                                                           PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases I to 20)
Griffais, R., Hoiseth, S.K., Zagursky, R.J., Metcalf, B.J., Peek, J.A., Sankaran, B. and Fletcher, L.D.
Chlamydia pneumoniae polynucleotides and uses thereof
Patent: US 6552294-A 2547 06-MAY-2003,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               to thioredoxin or of using same to modulate
                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                            1 (bases 1 to 20)
Cohen,D., Chumakov,I. and Blumenfeld,M.
Bhallelic markers for use in constructing a high density disequilibrium map of the human genome
Patent: US 6537751-A 7138 25-MAR-2003;
                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                    Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                    4.6%; Score 13.2; DB 1; 83.3%; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

4.6%; Score 13.2; DB 1;
Best Local Similarity 83.3%; Pred. No. 3.1e+02;
Matches 15; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wright, J.A., Young, A.H. and Lee, Y.S. Oligomucleotide sequences complementary thioredoxin reductase genes and methods cell growth Patent: US 6566514-A 54 20-MAY-2003; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                         20 bp DN.
US 6559294.
                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR337719 20 bp Sequence 54 from patent US 6566514. AR337719 AR337719.1 GI:33724287
                                                                                                                                                     /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
/wol_type="genomic DNA"
                                                                                                          Location/Qualifiers
                                                                                                                                        /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                   Sequence 2547 from patent AR312010
                                                                                                                                                                                                                                               825 CTGTGTCTCTTTCTTCT 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                726 CICIGGICALAGGACTIG 743
                                                                                                                                                                                                                                                                                                                                                                                                     AR312010.1 GI:31705436
                                                                                                                                                                                                                                                                            c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 CICIGALCACAGGICILG 2
                                                                                                                                                                                                                                                                              CTGTGTGGCTTTTTTTCT
                                                                                                                                                                          Query Match
Best Local Similarity 83.3'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .20
              Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                         AR312010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                            20
                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                       AR312010/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                         RESULT 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 178
AR337719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
```

SOURCE

ð

LOCUS

g à

. 0

Gaps

0;

PAT 18-DEC-2003

·.

Gaps

.; 0

PAT 07-JAN-2002

```
949 GCAAGAAGAGCCAAATTG 966
                                                                                                                      919 TCATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 gcaacaágagcaaaacrg 20
                                                                                                                                                                                                                                                               BD088966.1 GI:22634576 JP 2001321190-A/1210.
                                                                                                                                                 18 rcarcaccaccrrcarcc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                       artificial sequences.
1 (bases 1 to 20)
                                                                                                                                                                                                                                                                                           synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                            GENOTECHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD090346
                                                                                                                                                                                                                                                                                                                                                     Soeda, E
                                                                                                                                                                                                                                                                                                                                                                                                                         OS
PP
PP
PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                           RESULT 184
BD088966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BD090346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                    PAT 07-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Keith,T.
Novel human gene relating to respiratory diseases, obesity, and
                                                 Novel human gene relating to respiratory diseases, obesity, and inflammatory bowel disease Patent: WO 0178894—A 157 25-OCT-2001; Genome Therapetics Corp. (US)

Location/Qualifiers
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 3.1e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                          4.6%; Score 13.2; DB 1; Length 20; ilarity 83.3%; Pred. No. 3.18+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ho,S.P.
Crf 2? ligands in combination therapy
Crf 2? ligands in combination therapy
Patent: WO 0205749-A 3 24-JAN-2002;
Bristol-Myers Squibb Pharma Company (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1..20
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Primer"
                                                                                                                                    /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inflammatory bowel disease
Patent: WO 0178894- A 159 25-CCT-2001;
Genome Therapeutics Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                Sequence 159 from Patent WO0178894. AX326963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX496861 20 bp
Sequence 3 from Patent WO0205749.
AX496861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                764 GGCCTCCACTTCTGAGGG 781
                                                                                                                                                                                                                                                                   764 GGCCTCCACTTCTGAGGG 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX496861.1 GI:23342381
                                                                                                                                                                                                                                                                                                                                                                                                              AX326963.1 GI:18097674
                                                                                                                                                                                  /note="Primer"
                                                                                                                                                                                                                                                                                     GGCCTCTACTCCTGAGAG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 GGCCTCTACTCCTGAGAG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct artificial sequences.
synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 83.33
Matches 15; Conservative
                                                                                                                           1. .20
                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 15; Conserv
                                        Keith, T.
                                                                                                                                                                                                                                                                                                19
                                                                                                                                                                                                                                                                                                                                                       AX326963/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 183
AX496861/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                           RESULT 182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                          REFERENCE
                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                a
```

```
Ы
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 27-AUG-2002
                                                                                                                                               .
                                                                                                                                                                                                                                                                                                                               PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C12N15/09, C12N15/09, C12M1/00, C12Q1/68, G01N33/53, G01N33/566,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A method of arraying genome clone
Patent: JP 2001321190-A 2590 20-NOV-2001;
THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH, YUGENKAISHA
GENOTECHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A method of arraying genome clone
Patent: JP 2001321190-A 1210 20-NOV-2001;
THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH, YUGENKAISHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        띮
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Description of Artificial Sequence:Synthetic DNA
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
4.6%; Score 13.2; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 3.1e+02;
Matches 15; Conservative 0; Mismatches 3; Indels
                                                                                                        Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                               3; Indels
/organism="synthetic construct"
Mol type="unassigned DNA"
Ab Xref="traxon:32630"
/note="Antisense Oligonucleotide"
                                                                                                    Query Match

4.6%; Score 13.2; DB 1;
Best Local Similarity 83.3%; Pred. No. 3.1e+02;
Matches 15; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1..20
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A method of arraying genome clone.
BD090346
BD090346.1 GI:22635956
JP 2001321190-A/2590.
                                                                                                                                                                                                                                                                                                                                   bp
clone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Artificial Sequence
JP 2001321190-A/1210
20-NOV-2001
12-MAR-2001 JP 2001068285
BIICHI SOEDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 bp
                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                   20
A method of arraying genome
BD088966
```

PAT 18-SEP-2002

COMMENT

source

FEATURES

RESULT 186 LOCUS DEFINITION

à

BD131992

SOURCE ORGANISM

ACCESSION

VERSION KEYWORDS

AUTHORS TITLE

JOURNAL

COMMENT

REFERENCE

```
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. B. 1 (bases 1 to 20)

S Jonak, Z.L., Johanson, K.O. and Taylor, A.H.
Anti-alphabeta3 humanized monoclonal antibodies

Anti-alphabeta3 humanized monoclonal antibodies

SMITHKLINE BEECHAM CORP
PN JP 2002508656-A.19
PP 19-MAR-2002
PP 19-MAR-2002
PP 12-MAR-1998 JP 199859860
PI ZDENKA L. JONAK, KYUNG O JOHANSON, ALEXANDER H TAYLOR PC
C12N15/13, C07K16/28, C12N5/20, A61K39/395, G01N33/577, G01N33/68 CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Artificial Sequence
W0 02072815-A/224
19-SEP-2002
17-MXY-2001 W0 2001JP004139
12-MAR-2001 JP 01P 68285
BIICHI SOEDA
012015/09, C1202168
Description of Artificial Sequence: Synthetic DNA FH
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism='Artificial Sequence' Location/Qualifiers
                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                       BD132573 20 bp DNA linear
Anti-alphabeta3 humanized monoclonal antibodies.
BD132573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 4.6%; Score 13.2; DB 1; Best Local Similarity 83.3%; Pred. No. 3.1e+02; Matches 15; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A method of arraying genome clone
Patent: WO 02072815-A 224 19-SEP-2002;
EIICHI SOBDA,TAKESHI KUKITA
OS Artificial Sequence
PN WO 02072815-A/224
PD 19-SEP-2002
PF 17-MAY-2001 WO 2001JP004139
PR 12-MAR-2001 JP 01P 68285
PI BIICHI SOEDA
CC Description of Artificial Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .20
/organism="synthetic construct"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A method of arraying genome clone. BD176424 BD176424 BD176424 BD176424 I GI:29122132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic DNA"
/db_xref="taxon:10095"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .20
/organism="Mus sp."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     752 CCAGGGTCCCTAGGCCTC 769
          2 CGCAGGTGCCAAGAGCCC 19
                                                                                                                                                              BD132573.1 GI:23227518
JP 2002508656-A/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 CCAGGGTACCTTGGCCCC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Topology: Unknow
/desc = 'SBA884'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         artificial sequences.
1 (bases 1 to 20)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO 02072815-A/224.
synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Soeda, E.
                                                                                                                                                                                                      Mus sp.
                                                                                                                                                                                                                          Mus sp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FT
FT
                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 188
BD176424
                                                                  RESULT 187
                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                     BD132573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                           C12N15/09, C12N15/09, C12M1/00, C12Q1/68, G01N33/53, G01N33/566, PC
                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OS Homo sapiens (human)

PN JP 2002501743-A/54

PD 22-JAN-2002

PP 22-JAN-1999 JP 2000529423

PR 30-JAN-1998 US 60/073196

PI JIM A WRIGHT, AIPING H YOUNG YOON S LEE

PC C12N15/09, A61K31/711, A61K48/00, A61P35/00, A61P35/04, C07H21/04//

PC (A61K31/711, A61K48/00, A61K38/00, C12N15/00 CC Oligonucleotide sequence complementary to thioredoxin gene or CC thioredoxin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear PAT 18-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BD131992

20 bp DNA linear PAT 18-SEP-2002
Oligonucleotide sequence complementary to thioredoxin gene or
thioredoxin reductase gene and utilization thereof for controlling
ED131992
BD131992. GI:23226937
JP 2002501743-A/54.
HOMO sapiens (human)
HOMO sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wright, J.A., Young, A.H. and Lee, Y.S.
Oligonucleotide sequence complementary to thioredoxin gene or thioredoxin reductase gene and utilization thereof for controlling Patent: JP 2002501743-A 54 22-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              reductase gene and utilization thereof for controlling cell proliferation
Key Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                      Description of Artificial Sequence:Synthetic DNA FH Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism='Homo sapiens (human)'.
                                                                                                                                                                                          ce 1..20 /organism='Artificial Sequence' Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                  4.6%; Score 13.2; DB 1; Length 20; ilarity 83.3%; Pred. No. 3.1e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch 4.6%; Score 13.2; DB 1;
1. Similarity 83.3%; Pred. No. 3.1e+02;
15; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                       1. .20
/organism="synthetic construct"
/mol_type="genomic DRA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .20
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                  12-MAR-2001 JP 2001068285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                    JP 2001321190-A/2590
20-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                               785 CCCCTCTGGTGCCAAGAG 802
Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     788 CTCTGGTGCCAAGAGCTC 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CACCITIGITIGICAAGAG 18
                                                                             EIICHI SOEDA
                                                                                                                                   C12N15/00
                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                 C12N15/00,
                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Key
  OS
PP
PC
PC
                                                                                                                                   CG FG
                                                                                                                                                                                            FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SSELL
```

0

Gaps

ö

PAT 18-MAR-2003

Key

source

FEATURES

Matches

à

RESULT 189

d

ACCESSION VERSION

KEYWORDS

SOURCE

TITLE JOURNAL

FEATURES

AUTHORS

REFERENCE

ö

Gaps

. 0

PAT 08-MAY-2003

```
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                    Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.5%; Score 13; DB 1; Length 17; 100.0%; Pred. No. 2.8e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                  4.5%; Score 13; DB 1; Length 17;
100.0%; Pred. No. 2.8e+02;
cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX735717 17 bp DNA Sequence 1307 from Patent WO03025177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX761661 17 bp DNA
Sequence 4982 from Patent W003040369.
AX761661
                                                                                                                                                                       Patent: WO 03025175-A 268 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1
Telerman, A., Amson, R. and Tuijnder, M.
                                                                                                                                                                                                                              1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX735717.1 GI:30514994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX761661.1 GI:32256277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                       709 GAGICCCAGGAGA 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        709 GAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                      GAGTCCCAGGAGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGTCCCAGGAGA 3
                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                    Best_Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                        15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15
                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 192
AX735717/c
                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 193
AX761661/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                             FEATURES
                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                              PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 06-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 08-MAY-2003
                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                               Unclassified.

1 (bases 1 to 14)

Fauchet, C.R.J.

Fixing unit with an end imprint in a threaded terminal portion

Patent: US 6632057-A 119 14-OCT-2003;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 16)
Dalie,B., Miller,K., Murgolo,N. and Tindall,S.
Humanized monoclonal antibodies against human interleukin-4
Patent: US 5597710-A 10 28-UAN-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·.
0
                                  Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                Query Match
4.6%; Score 13.2; DB 1;
Best Local Similarity 83.3%; Pred. No. 3.1e+02;
Matches 15; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.5%; Score 13; DB 1; Le
100.0%; Pred. No. 2.2e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 13; DB 1; Li
Pred. No. 2.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.5%; Scor.
100.0%; Pred. No. 2...
0; Mismatches
                                                                                                                                                                                                                            AR408026 119 from patent US 6632057.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX728634 17 bp DN
Seguence 268 from Patent WO03025175.
AX728634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         134311 16 bp Sequence 10 from patent US 5597710.
/db xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .14
/organism="unknown"
                                                                                                    785 CCCCTCTGGTGCCAAGAG 802
                                                                                                                                      CACCTTTGTTGCCAAGAG 18
                                                                                                                                                                                                                                                                               AR408026.1 GI:40158013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX728634.1 GI:30507977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           I34311.1 GI:1825102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             718 GAGAGTGACTCTG 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 770 CACTTCTGAGGGC 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13 CACTICTGAGGGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGAGTGACTCTG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                AR408026
                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX728634/c
LOCUS
                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                            AR408026/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 191
```

ACCESSION VERSION KEYWORDS

SOURCE

134311/c

g

TITLE JOURNAL FEATURES

VERSION

g

REFERENCE AUTHORS ·,

Gaps

٥;

PAT 25-JUN-2003

dd

```
RESULT 196
AX352917/c
                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX362762/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 198
                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR081040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                     ð
                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                   PAT 18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Yaoi,K.C. and Mitsuishi,Y.N.
Xyloglucanase, polymucleotide encoding the enzyme, and method of preparing the enzyme
Pateant: EP 1358844-4 19 08-02T-2003;
National Institute of Advanced Industrial Science and Technology
                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lyamichev, V., Allawi, H., Dong, F., Neri, B.P. and Vener, I.T. Mucleic acid accessible hybridization sites
Patent: WO 0199837-A 150 27-DEC-2001,
THIRD WAVE TECHNOLOGIES, INC. (US)
                                                                                                                                                                                                              ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                             Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.5%; Score 13; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 3e+02; Matches 13; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                        ch 4.5%; Score 13; DB 1; Le 1 Similarity 100.0%; Pred. No. 2.8e+02; 13; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1..18
/organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                Patent: WO 03040369-A 4982 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                             Sequence 150 from Patent W00198537. AX419813
                                                                                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX924437 18 bp
Sequence 19 from Patent BP1350844.
AX924437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                               AX419813.1 GI:21524180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX924437.1 GI:40217243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct artificial sequences.
                                                                                                                                                                                                                                         709 GAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               955 AGAGCCAAATTGA 967
                                                                                                                                                                                                                                                          18 AGAGCCAAATTGA 6
                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                   RESULT 194
AX419813/c
                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX924437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                              LOCUS
```

ð

```
PAT 06-FEB-2002
                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 15-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
       4.5%; Score 13; DB 1; Length 18; 66.7%; Pred. No. 3e+02;
                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                            Loukachov, V.V., van Gemen, B. and Goudsmit, J. Collection of binding molecules Patent: BP 1174518-A 123 23-JAN-2002; Amsterdam Support Diagnostics B.V. (NL) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Loukachov,V.V., Goudsmit,J. and van Gemen,B. Collection of binding molecules
Patent: WO 0208463-A 123 31-JAN-2002;
Amsterdam Support Diagnostics B.V. (NL)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.5%; Score 13; DB 1; Le
100.0%; Pred. No. 3.2e+02;
ative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.5%; Score 13; DB 1; L
100.0%; Pred. No. 3.2e+02;
ative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1..19
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db xref="texon:32630"
/note="position 65"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1..19
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="teaxon:32630"
/note="position 65"
                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                          5; Mismatches
                                                                                                                                                                                                     AX352917 19 bp
Sequence 123 from Patent EP1174518.
AX352917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX362762 19 bp
Sequence 123 from Patent W00208463.
AX362762
                                                                                                                                                                                                                                                                     AX352917.1 GI:18617999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX362762.1 GI:18694902
                                                                                 918 ATCATCACCACC 932
                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct artificial sequences.
                                                                                                    |:||:||:||:|
2 AYCAYCAYCAYC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            828 TGTCTCTTTCTT 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                828 IGICICITITUTE 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
Query Match
Best Local Similarity 66.79
Matches 10, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 4.5'
Best Local Similarity 100.
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18 IGICICITITICII 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 rererererer 6
```

rge.res

```
Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                              RESULT 201
AX038441/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 202
                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                             KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX295274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 10-APR-2003
                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                              PAT 29-JAN-2003
     PAT 31-AUG-2000
                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 20)
Monia,B.P., Gaarde,W.A., Freier,S.M. and Wancewicz,E.
Antisense modulation of TERT expression
Patent: 18 6492171-A 20 10-DEC-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.5%; Score 13; DB 1; Length 20; 100.0%; Pred. No. 3.46+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                         Query Match 4.5%; Score 13; DB 1; Length 20; Best Local Similarity 76.5%; Pred. No. 3.4e+02; Matches 13; Conservative 2; Mismatches 2; Indels
                                                                                                 Unclassified.

1 (bases 1 to 20)

Yu,S.-M. and Chan,M.-T.
3' untranslated regions of .alpha.-amylase genes
Patent: US 5969127-A 7 19-0CT-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 20)
Monia,B.P., Gaarde,W.A. and Wancewicz,E.
Antisense inhibition of tert expression
Patent: US 6331399-A 20 18-DEC-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                             AR263572 20 bp 1
Sequence 20 from patent US 6331399.
AR263572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 from patent US 6492171.
AR266013
AR266013.1 GI:29694859
                                                                                                                                                                                                  /organism="unknown"
/mol_type="unassigned DNA"
AR081040 20 bp
Sequence 7 from patent US 5969127.
AR081040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .20
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .20
/organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                 720 GAGTGACTCTGGTCATA 736
                                                                                                                                                                                                                                                                                                                                                                                                                                        AR263572.1 GI:28075317
                                              AR081040.1 GI:10007768
                                                                                                                                                                                                                                                                                                                 1 GCGGGACTCTSSTCATA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            818 GGGTTGGCTGTGT 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.(
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 GGGTTGGCTGTGT 7
                                                                                                                                                                                      1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR266013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                         Unknown.
                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
                                                                                                                                                                                        source
     LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                    RESULT 199
AR263572/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR266013/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 200
                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

```
Barany, F., Zirvi, M., Gerry, N.P., Favis, R. and Kliman, R. Method of designing addressable array for detection of mucleic acid sequence differences using ligase detection reaction Patent: WO 0179548-A 7036 25-OCT-2001; CORNELL RESEARCH FOUNDATION, INC. (US)
                                                                                                                                                                                                                                                               PAT 16-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 21-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              De Canck,I.D., Rossau,R. and Rombout,A.
Method for the amplification of his class i alleles
Patent: WO 0061795-A 198 19-CCT-2000;
Patent: WO 0061795-A 198 19-CCT-2000;
CANCK ILSE DE (BE); ROSSAU RUDI (BE); INNOGENETICS NV (BE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                   .
0
                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.5%; Score 13; DB 1; Length 20; 100.0%; Pred. No. 3.4e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.5%; Score 13; DB 1; Length 20;
100.0%; Pred. No. 3.4e+02;
iive 0; Mismatches 0; Indels
Query Match 4.5%; Score 13; DB 1; Length 20; Best Local Similarity 100.0%; Pred. No. 3.4e+02; Matches 13; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="synthetic construct"
/mol type="unassigned DNA"
/db xref="taxon:12630"
/noTe="Hypothetical Probe Sequence"
                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20 bp E Sequence 7036 from Patent WO0179548. AX295274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .20
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                            AX038441 20 bp
Sequence 198 from Patent WO0061795.
AX038441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX295274.1 GI:17056963
                                                                                                                                                                                                                                                                                                                                AX038441.1 GI:11227789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            712 TCCCAGGAGAGTG 724
                                                                                                 818 GGGTTGGCTGTGT 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   718 GAGAGTGACTCTG 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 rcccaggagagaga 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14 GAGAGTGACTCTG 2
                                                                                                                                          7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ROMBOUT ANNELIES
                                                                                                                         19 GGGTTGGCTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
```

```
Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown
                                                                                                                                                                                                                          LOCUS
DEFINITION
ACCESSION
                 source
                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                RESULT 206
I37003/c
                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 208
193853/c
                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
    FEATURES
                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         153618
                                                                                                                                                       g
                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                             PAT 03-JUL-2002
                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 29-SEP-1999
                                                                                          synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 17)
Odink, K.G., Tarcsay, L., Brueggen, J., Wiesendanger, W., Cerletti, N.,
Sorg, C., DeWolf-Peeters, C. and Delabie, J.
Novel cytokines
Patent: BP 0412050-A 26 06-FEB-1991;
CIBA-GEIGY AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 06-FEB-1997
                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 17)
Oblivera, B.M., Hillyard, D.R., Imperial, J.S. and Monje, V.D. Omega-conotoxin peptides
Patent: US 5591821-A 7 07-JAN-1997;
                                                                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
Unclassified.
1 (bassified.
1 (bass 1 to 17)
Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T.
C-myb ribozymes having 2'-5'-linked adenylate residues
Patent: US 5817796-A 1359 06-OCT-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                         Query Match
4.4%; Score 12.8; DB 1; Length 17;
Best Local Similarity 97.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

4.4%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                       1...17
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR046566 17 bp DN
Sequence 1359 from patent US 5817796.
AR046566.1 GI:5968031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 7 from patent US 5591821.
133456
133456.1 GI:1824247
                             17 bp
                          A34266 Synthetic sequencing primer.
                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                893 ACTICICAGCIICIGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          803 CTCTCCTCCAACTCAG 818
                                                     A34266
A34266.1 GI:21694218
                                                                                                                                                                                                                                                                                                                                                                                          1 Actricrasciaciac 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 crcaccrcarcrcag 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                        LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
RESULT 203
                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                             JOURNAL
                                                                                                                                       REFERENCE
                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       133456/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR046566
                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
```

```
0;
                                                                                                                                                                                                                                                                                                           PAT 13-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  UnALLOWALT.
Unclassified.
1 (bases 1 to 17)
Stinchcomb.D.T., Draper,K., McSwiggen,J. and Jarvis,T.
C-myb targeted ribozymes
Patent: US 5646642-A 1359 08-JUL-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.

I (bases to 17)
Draper,K.G. Pavco,P., McSwiggen,J., Gustofson,J. and Stinchcomb,D.T.
Stromelysin targeted ribozymes
Patent: US 5612215-A 16 18-MAR-1997;
Location/Qualifiers
                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 3.1e+02; ative 0; Mismatches 2; Indels
                                                                                         Query Match 4.4%; Score 12.8; DB 1; Length 1 Best Local Similarity 87.5%; Pred. No. 3.1e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
4.4%; Score 12.8; DB 1;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         153618 17 bp DNA Sequence 1359 from patent US 5646042. 153618 153618.1 GI:2474821
                   1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                     Sequence 16 from patent US 5612215.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
                                                                                                                                                                    727 TCTGGTCATAGGACTT 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            815 TCAGGGTTGGCTGTGT 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           803 CTCTCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 CTCACCTCCATCTCAG 17
                                                                                                                                                                                          17 rcagrerrescreagr 2
                                                                                                                                                                                                                                                                                                                                                             I37003.1 GI:2084963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 87.55
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.
```

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                           RESULT 211
AX216282/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 212
AX218118/c
                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                         ð
                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                   ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 07-SEP-2001
PAT 01-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 6327 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Blatt,L., Mcswiggen,J. and Chowrira,B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nogo gene expression
Patent: WO 0159103-A 771 16-AUG-2001;
RIBOZYME PHARMACEUICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                   0;
                                                                                                        1 (bases 1 to 17)
Draper,K.G., Pavco,P., McSwiggen,J., Gustofson,J. and
Stinchcomb,D.T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.4%; Score 12.8; DB 1; Length 17; llarity 87.5%; Pred. No. 3.1e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                    4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 3.1e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
linear
                                                                                                                                                      Method of reducing stromelysin RNA via ribozymes Patent: US 5731295-A 16 24-MAR-1998; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                RNA
 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                17 bp RN
US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX215329 17 bp 1
Seguence 771 from Patent W00159103.
AX215329
                                                                                                                                                                                                                          /mol_type="unassigned DNA"
              Sequence 16 from patent US 5731295.
17 bp
                                                                                                                                                                                                               /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6327 from patent
                                                                                                                                                                                                                                                                                                                                                                                                                                           AR328925
AR328925.1 GI:33714733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX215329.1 GI:15525372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             836
                                                                                                                                                                                                                                                                                                               815 TCAGGGTTGGCTGTGT 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            artificial sequences.
                                                                                                                                                                                                                                                                                                                                        Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rrrccrerererererr 1
                           193853
193853,1 GI:3938323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct
                                                                                                                                                                                                                                                                                                                                  rcagrariagergagr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             821 TIGGCIGIGICICITI
                                                                                                                                                                                                                                                                                   Conservative
                                                                                  Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                   Best_Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                AR328925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
 193853
                                                                                                                                                                                                                                                                                                                                          17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16
                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                    RESULT 209
AR328925/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 210
                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                               REFERENCE
                                                                                                                             AUTHORS
                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX215329
                                                                                                                                                                                   FEATURES
                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                              PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Blatt,L., Mcswiggen,J. and Chowrira,B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 3560 16-AUG-2001;
RIBOZYME WO 0159103-A 3560 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nogo gene expression
Patent: WO 0159103-A 1724 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence
McSwiggen, James (US) ; Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 3.1e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                              Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                        Indels
                                                                                                                                                         4.4%; Score 12.8; DB 1;
87.5%; Pred. No. 3.1e+02;
Live 0; Mismatches 2;
                     1..17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db xref="taxon:3260"
/note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/nofe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX218118 17 bp R1
Sequence 3560 from Patent W00159103.
AX218118
                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1724 from Patent W00159103.
AX216282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note="Nucleic Acid"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX218118.1 GI:15528179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX216282.1 GI:15526325
                                                                                                                                                                                                                                                  920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           891 TIACTICAGCTICT 906
                                                                                                                                                                                                                                                                                 CATCATCTCCACCCTC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 TTTTTTCTCAGCTTCT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14; Conservative
                                                                                                                                                                                                        14; Conservative
                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
```

Mon Jul 12 11:21:14 2004

```
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 217
AX500260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 216
                                                                                                                                                                                                             JOURNAL
                                                                                                                                              REFERENCE
                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX423480
                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              qq
                                  ö
                                                                                                                                                                          PAT 10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 23-MAR-2002
                                                                                                                                                                                                                                                                                                                  Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                     R. (US)
                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 4.4%; Score 12.8; DB 1; Length 17; Best Local Similarity 87.5%; Pred. No. 3.1e+02; Matches 14; Conservative 0; Mismatches 2; Indels
Query Match
4.4%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 4.4%; Score 12.8; DB 1; Length 17; 1 Similarity 87.5%; Pred. No. 3.1e+02; 14; Conservative 0; Mismarches 2; Indels
                                                                                                                                                                                                                                                                                                                                                               Patent: WO 0157206-A 812 09-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Fattaey, Ali
Location/Qualifiers
                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             St Croix, B., Kinzler, K.W. and Vogelstein, B. Endothelial cell expression patterns Patent: WO 0210217-A 323 07-PEB-2002, The Johns Hopkins University (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                          AX227440
Sequence 812 from Patent WO0157206.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 323 from Patent W00210217. AX393393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX393393.1 GI:19701375
                                                                                                                                                                                                                     AX227440.1 GI:15556581
                                                               844 TGAAGACAGCGTCCTG 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            796 CCAAGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        706 AGCGAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 AGTGAGACCCAGGAGA 17
                                                                                    TGAAGACATCCTCCTG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 caaaaagcrcrcrrc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                     1) enzyme
                                                                                           17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 214
AX393393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                         RESULT 213
AX227440/c
                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

RESULT 215 AX423063

```
PAT 18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 27-SEP-2002
                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                   Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Mclaughlin, F.G. and Randi, A.M.
Randi, A.M.
Rethod and reagent for the inhibition of erg
Patent: WO 0188124-A 1399 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Mclaughlin,F.G. and Randi,A.M.
Method and reagent for the inhibition of erg
Patent: WO 0188124-A 1816 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ٠,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.4%; Score 12.8; DB 1; Length 17; Best Local Similarity 87.5%; Pred. No. 3.1e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match
4.4%; Score 12.8; DB 1;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
Sequence 1399 from Patent W00188124.
AX423063
AX423063.1 GI:21526445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX423480
Seguence 1816 from Patent WO0188124.
AX423480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1567 from Patent BP1229046.
                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="Homo sapiens"
/mol_type="unassignēd RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX423480.1 GI:21526862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX500260.1 GI:23382553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           816 CAGGGTTGGCTGTGTC 831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        816 CAGGGTTGGCTGTGT 831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 caddarrecererere 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
ORGANISM
```

```
RESULT 220
AX531207
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 221
                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX725166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                            PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear PAT 22-NOV-2002
                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           :
0
                                                                                                                                                                                           ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
4.4%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                          ch 4.4%; Score 12.8; DB 1; Length 17; 1 Similarity 87.5%; Pred. No. 3.1e+02; 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human testis expressed patched like protein
Patent: BP 1229046-A 1568 07-AUG-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                           Human testis expressed patched like protein Patent: EP 1229046-A 1567 07-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human posh-like protein 1
Patent: EP 1239051-A 715 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                     Sequence 1568 from Patent EP1229046. AX500261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 715 from Patent EP1239051.
AX531206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                   /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Aeomica, Inc. (US)
Location/Qualifiers
                                                       Aeomica, Inc. (US)
Location/Qualifiers
1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX531206.1 GI:25254205
                                                                                                                                                                                                                                                                                                                                                                       AX500261.1 GI:23382554
                                                                                                                                                                                                                       915 ATTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     915 ATTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTACAATCACCACCA 16
                                                                                                                                                                                                                                             ATTACAATCACCACCA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                            Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shannon, M.
 ı
Zhan, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zhan, J.
                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
                                                                                        source
                                                                                                                                                                                                                                                                                              RESULT 218
AX500261
                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 219
AX531206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EATURES
                                                                        PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                            LOCUS
```

```
;
0
                                                                                                                                                                                                                                                   linear PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (house mouse)
Mus musculus
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                 Gaps
                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
Query Match
4.4%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 3.1e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 3.1e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          medicines
Patent: WO 03025176-A 2853 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX725166 17 bp DNA Sequence 2853 from Patent WO03025176. AX725166.1 GI:30504509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human posh-like protein 1
Patent: EP 1239051-A 716 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                       Sequence 716 from Patent EP1239051.
AX531207.1 GI:25254207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             838 CTTCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              921 ATCACCACCACCTCC 936
                                                                                        838 CTTCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 cricicegagacage 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 ATCACCCCCACCCCC 17
                                                                                                                                     2 criciccedadacade 17
                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 87.5
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 14; Conserval
                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shannon, M.
```

```
3 TTAACGCAGGAAGAGC 18
 JP 2002509721-A/1690.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                               A61P29/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 225
AR166765
                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     du
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD198664 17-JUL-2003 Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.

BD198664.1 GI:33008434
                                     PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                    Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 3032517-A 820 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 4.4%; Score 12.8; DB 1; Length 17; Best Local Similarity 87.5%; Pred. No. 3.1e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
4.4%; Score 12.8; DB 1;
Best Local Similarity 87.5%; Pred. No. 3.1e+02;
Matches 14; Conservative 0; Mismatches 2;
                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: WO 03040369-A 2888 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX759567 17 bp DNA Sequence 2888 from Patent WO03040369.
                                   17 bp D1
Sequence 820 from Patent WO03025177.
                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                   AX735230
AX735230.1 GI:30514507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX759567.1 GI:32254183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             897 CTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         802 GCTCTCCTCCAACTCA 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GATCTCCTACAACTCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16 CTTAGCTTCTGAGATC 1
                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX759567
                                 LOCUS
RESULT 222
AX735230/c
                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 223
AX759567
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BD198664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

```
A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                       Homo sapiens (human)
JP 2002509721-A/1690
02-APR-2002
24-MAR-1999 JP 2000541291
27-MAR-1999 US 60/079678
PAMELA A PACO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, JAMES A MCSWIGGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 17-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                          PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 18)
Kramer, V. Carry, Worgan, M. Kent., Anderson, A. Robert., Hart, H. Prim.,
Warren, G. W., Dunn, M.M. and Chen, J. Shong.
Insecticidal toxins from Photorhabdus luminescens and nucleic acid
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Butheria, Primates; Catarrhini, Hominidae, Homo. I (bases 10 17)
Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A. Method and reagent for treating diseases or conditions concerning Participating in vasculogenic response Participating in vasculogenic response RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                  OS HOMO SAPURACIONADIA

DO 202509721-A/1690

PD 20-APR-2002

PP 24-RRA-1999 JP 2000541291

PR 27-MAR-1999 US 60/079678

PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHC

PI JAMES A MCSWIGGEN

PI JAMES A MCSWIGGEN

CLINIS/09, AGIK31/7088, AGIK31/7125, AGIK48/00, AGIP3/10, AGIP17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Method and reagent for treating diseases or conditions CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 12.8; DB 1; Length 17; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                concerning molecule
participating in vasculogenic response
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.4%; Score 12.8; DB 1;
87.5%; Pred. No. 3.3e+02;
7ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequences coding therefor
Patent: US 6281413-A 21 28-AUG-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR166765 18 bp 1
Sequence 21 from patent US 6281413.
AR166765.1 GI:16242239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .18
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      707 GCGAGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            944 TTTACGCAAGAAGAGC 959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 GCGAGTTCGAGGAGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 87.5%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14; Conservative
```

```
BD062545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                 RESULT 229
BD062545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD094660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                   à
                                                                                                                                                                          Пb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 20-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·;
                                                                                                                                        Beck,J.Joseph.
Detection of wheat and barley fungal pathogens using the polymerase chain reaction
Patent: US 6158680-A 26 19-MAR-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                      PAT 12-JUN-2003
                    PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gee, N., Brown, J. and Bertelli, F. Methods for screening using interleukin soluble trimolecular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (Dases 1 to 18)
Cohen,D., Chumakov,I. and Blumenfeld,M.
Biallelic markers for use in constructing a high density
disequilibrium map of the human genome
Patent: US 6537751-A 8157 25-MAR-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

4.4%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                        4.4%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 3.3e+02; cive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                         linear
                      linear
                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                         AR296422
Sequence 8157 from patent US 6537751.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX616679 18 bp 1
Sequence 36 from Patent WO02095414.
AX616679
                Sequence 26 from patent US 6358680.
                                                                                                                                                                                                                                  /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                        1. .18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX616679.1 GI:28447615
                                                                                                                                                                                                                                                                                                                                                                                                                                      AR296422
AR296422.1 GI:31683706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    920 CATCACCACCACCTC 935
                                                            AR200637.1 GI:20251525
                                                                                                                                                                                                                                                                                                                 707 GCGAGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                      GCGAGTCTCGGGAGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18 CATCACCATCACCATC 3
                                                                                                                              (bases 1 to 18)
                                                                                                                                                                                                                                                                                        14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                       Unknown.
Unclassified.
                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             complex
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                         Unknown.
                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 228
AX616679
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                  RESULT 227
AR296422/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                     DEFINITION
                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
RESULT 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                    JOURNAL
                                                  ACCESSION
                                                               VERSION
KEYWORDS
                                                                                                                               REFERENCE
                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
            AR200637
                                                                                                                                                                                                 FEATURES
                                                                                                                                                        TITLE
                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Db
                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                           g
```

```
BDU94660 18 bp DNA linear PAT 27-AUG-2002
Fusion gene expressing a protein capable of capturing a metal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                     ·:
                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
artificial sequences.

I (bases 1 to 18)
Tanaka, A. and Ueda, M.
Fusion gene expressing a protein capable of capturing a metal
patent: WO 0138517-A 2 31-MAY-2001;
TOYOTA JIDOSHA KK, ATSUO TANAKA, MITSUYOSHI UEDA
OS Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FI KATE LOUGHNEY, DONALD E STAUNTON, ROSEWAY VAZEAU PC C12N15/12, CO7K14/705, C12N15/11, C07K16/28, C07K16/42 CC of Artificial Sequence:primer Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
4.4%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                          Length 18;
                                                                                                                                                                                        Query Match 4.4%; Score 12.8; DB 1; Length 1
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD062245.1 GI:22608148
JP 2001506139-A/31.
synthetic construct
artificial sequences.
1 (Bases I to 18)
Loughney, K., Staunton, D. E. and Vazeau, R.
ICAM-6 materials and methods
patent: JP 2001506139-A 31 15-MAY-2001;
ICOS CORP
OS Artificial Sequence
PP 12-OCT-1998 JP 1999524640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .18
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                     /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="6His tag"
                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
Patent: WO 02095414-A 36 28-NOV-2002;
WARNER-LAMBERT COMPANY (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08/955661
                                                                                                                                                                                                                                                                                                                                                                                                                                      18 bp ICAM-6 materials and methods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Artificial Sequence
JP 2001506139-A/31
15-MAY-2001
22-0CT-1998 JP 1999524640
22-0CT-1997 US 08/95566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD094660.1 GI:22640248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                    920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CATCACCATCACCATC 16
                                                                                                                                                                                                                                                                                                                              1 CATCACCATCACCATC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO 0138517-A/2.
                                                                       . .18
```

source

FEATURES

```
BD137912 18-SEP-2002 Detection of wheat and barley fungal pathogens using the polymerase
                                                                                                                                                                                                                                                                                                                 Beck,J.J. Detection of wheat and barley fungal pathogens using the polymerase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Staphylococcus aureus
Staphylococcus aureus
Staphylococcus aureus
Bacteria; Firmicutes; Bacillales; Staphylococcus.
1 (bases I chases I charmann, R.
Springer, W. and Endermann, R.
SPECIFIC GENE PROBES AND METHODS FOR QUANTITATIVE DETECTION OF METHICILIN-RESISTANT STAPHYLOCOCCI
Patent: WO 9513395-A 10 18-MAY-1995;
BAYER AG (DE)
Other publication DE 4338119 950511.
                                                                                                                                                                                                                                                                                                                                                                 Chain reaction
Patent: UP 2002504347-A 26 12-FEB-2002;
NOVARTIS AG
OS Attificial Sequence
PN UP 2002504347-A/26
PD 12-FEB-1099
PR 20-FEB-1999 US 09/026601
PP 18-FEB-1999 US 09/026601
PP C12N15/09,C12Q1/68,C12N15/00
CC Description of Artificial Sequence: primer JB660 FH Kallocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
4.4%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .19
Corganism="Staphylococcus aureus"
/mol_type="unassigned DNA"
/db_xref="taxon:1280"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
4.4%; Score 12.8; DB 1;
Best Local Similarity 87.5%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 10 from Patent W09513395.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                j. .18
                                                                                                                                         BD137912.1 GI:23232857
                                                                                                                                                                                     JP 2002504347-A/26.
synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 18)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 707 GCGAGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           917 TATCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGAGTCTCGGGAGAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 TATCTTCACCAACACC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A44534.1 GI:2299352
                                                                                                                   chain reaction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                               BD137912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FT
             RESULT 232
BD137912
                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 233
                                                                                                                                         ACCESSION
                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A44534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic construct
Sm synthetic construct
artificial sequences.

I (bases 1 to 18)
Kramer, V.C., Morgan, M.K., Anderson, A.R., Hart, H.P., Warren, G.W.,
Dunn, M. M. and Chen, J.S.
Insecticidal toxin from Photorhabdus
Dunn, M. M. and Chen, J.S.
Insecticidal toxin from Photorhabdus
AvoNaRTIS AG
OS Artificial Sequence
NOVARTIS AG
NOVARTIS AG
NOS Artificial Sequence
PD 12-FEB-1999 US 2000532529
PR 18-FEB-1999 US 09/027080, 20-JAN-1999 US 60/116439 PI
VANCE CARY KRAMER, MICHAEL KENT MORGAN, ARNE ROBERT ANDERSON, PI
HOPE PRIM HART,
TOPEROPEN MARKER WARRELY, MARKER MARKER ANDERSON, PI
TOPEROPEN WANNER WARRELY, MARKER MARKER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 18-SEP-2002
                     31-MAY-2001
26-0001-2000
19-NOV-1909 UP 99P 330226
ATSUO TANAKA,MITSUYOSHI UEDA
C12N15/10,C12N1/15,C12N1/19,C12N1/21,C12N5/10,C02F1/20,C02F1/
B01D53/64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PI GREGORY WAYNE WARREN, MARTHA MARY DUNN, JENG SHONG CHEN PC CIZNIS/09, A01H5/00, A01H6/00, C07K14/24, C12N1/15, C12N1/19 PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CI2NI/21,C12NS/10,
PC C12P21/02,C12N15/00,C12N5/00
CC Description of Artificial Sequence:oligonucleotide FH
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                          ce 1. .18
/organism='Artificial Sequence'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
4.4%; Score 12.8; DB 1; Length 18;
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism='Artificial Sequence'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                              1..18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match
Best Local Similarity 87.5%; Pred. No. 3.3e+02;
Matches 14; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CATCACCATCACCATC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            944 TTTACGCAAGAAGAGC 959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3 TTAACGCAGGAAGAGC 18
  0138517-A/2
                                                                                                                                                                                                  Synthetic DNA
                                                                                                                                                                                                                                                       source
PN
PP
PC
PC
PC
CC
CC
FH
```

DEFINITION

BD136655 LOCUS

ACCESSION VERSION

ORGANISM

REFERENCE AUTHORS

KEYWORDS SOURCE

TITLE JOURNAL

COMMENT

FEATURES

à g

RESULT 231

ò 셤 0;

Gaps

ó

Key

PAT 07-MAR-1997

ö

Gaps

0;

```
source
                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 238
AX035697/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                     RESULT 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                   AR393850
              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.

1 (bases 1 to 19)

Bennett, C.F. and Watt, A.T.
Antisense modulation of tumor necrosis factor receptor 2 expression Patent: US 6410334-A 6 25-UJN-2002;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
                                                    PAT 17-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 25-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                        1 (bases 1 to 19)

Berdoz, J. and Kraehenbuhl, J.-P.

PCR amplification of rearranged genomic variable regions of immunoglobulin genes

Patent: US 625829-A 107 10-JUL-2001;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.

1 (bases 1 to 19)
Strivastava, A., Pomnazhagan, S., Chloemer, R.H., Wang, X.-S., Yoder, M.C., Zhou, S.-Z., Escobedo, J. and Dwarki, V.
AAV vectors
                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         °,
                                                                                                                                                                                                                                                                                              Query Match 4.4%; Score 12.8; DB 1; Length 19; Best Local Similarity 87.5%; Pred. No. 3.5e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 19
                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.4%; Score 12.8; DB 1;
87.5%; Pred. No. 3.5e+02;
ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                              Sequence 107 from patent US 6258529. AR161797
                                                                                                                                                                                                                                                      /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                              AR215691 19 bp
Sequence 6 from patent US 6410324.
AR215691. GI:23313947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR281774 19 bp
Sequence 1 from patent US 6521225.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/mol_type="genomic DNA"
                                                                                        AR161797.1 GI:16228748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR281774.1 GI:29717568
                                                                                                                                                                                                                                                                                                                                                   752 CCAGGGTCCCTAGGCC 767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 778 AGGCAGCCCCTCTGG 793
                                                                                                                                                                                                                                                                                                                                                                           3 ccasasrcccrrsscc 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 AGGGCAGCCCGTTTGG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 87.54
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .19
                                                                                                                                              Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR281774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                  Unknown.
                                                                                                                                 Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 236
AR281774/C
LOCUS
DEFINITION
ACCESSION
                                                           DEFINITION
ACCESSION
                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 235
AR215691/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                      RESULT 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                       AUTHORS
TITLE
                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                         REFERENCE
                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                   AR161797
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Db
```

```
Unclassified.
1 (bases 1 to 19)
Dean, F.B. and Lasken, R.S.
Method of amplifying whole genomes without subjecting the genome to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Billault, A., Cole, S., Garnier, T., Gordon, S. and Buchrieser-Brosch, R.
Deleted sequences in m. Bovis bcg/m. Bovis or m. Tuberculosis, method for detecting mycobacteria using said sequences and vaccines Patent: WO 0055562-A 35 21-SEP-2000;
BILLAULT ALAIN (FR); COLE STEWART (FR); GARNIER THIERRY (FR); GORDON STEPHEN (FR); BUCHRIESER BROSCH ROLAND (FR); PASTEUR
                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 15-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                         PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mycobacterium bovis BCG
Mycobacterium bovis BCG
Mycobacterium bovis BCG
Batteria, Actinobacteria, Actinobacteridae, Actinomycetales,
Corynebacterinae, Mycobacteriaceae, Mycobacterium
tuberculosis complex.
                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ٠;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 19;
                                                                                                                                        Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .19
/organism="Mycobacterium bovis BCG"
/mol_type="unassigned DNA"
/nob_xref="taxon:33892"
/note="TB1.2F"
                                                                                                                                   Query Match
4.4%; Score 12.8; DB 1;
Best Local Similarity 87.5%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
4.4%; Score 12.8; DB 1;
Best Local Similarity 87.5%; Pred. No. 3.5e+02;
Matches 14; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      denaturing conditions
Patent: US 6617137-A 39 09-SEP-2003;
Location/Qualifiers
Patent: US 6521225-A 1 18-FEB-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                     AR393850 19 bp 1
Sequence 39 from patent US 6617137.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 35 from Patent WO0055362. AX035697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.4%; Score 12.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .19 /organism="unknown" /wol_type="genomic DNA"
                                                               /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR393850.1 GI:40120936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX035697.1 GI:11191293
                                                                                                                                                                                                                            920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        705 CAGCGAGTCCCAGGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 CATGGAGTCCCAGGAG 18
                                                                                                                                                                                                                                                                      19 CATAACCACCACGCTC 4
                                                 1. .19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INSTITUT (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                   AR393850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
```

PAT 09-AUG-2002

Matches

à

RESULT 239 AX101072

ACCESSION

VERSION KEYWORDS

SOURCE

REFERENCE

TITLE

JOURNAL

FEATURES

```
BD006133 19 bp DNA linear PAT 31-JAN-2002 Methods and compositions for liver specific delivery of therapeutic molecules using recombinant AAV vectors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 19)

2 Sirvastaa, A., Chomazhagan, S., Chloemer, R.H., Wang, X.S., Yoder, M.C., Zhou, S.Z., Escobedo, J. and Dwarki, V. Methods and compositions for liver specific delivery of therapeutic molecules using recombinant AAV vectors
Patent: JP 2001500376-A 1 16-JAN-2001;
CHIRON CORP, INDIANA UNIVERSITY
                                                                                                                                                                                                                    Denefle, P., Rosier-Montus, M.F., Prades, C., Arnould-Reguigne, I., Duverger, N., Allikmets, R. and Dean, M.

Nucleic acids of the human abcas, abcas, and abcal0 genes, vectors containing such nucleic acids and uses thereof
Patent: WO 0246458-A 149 13-UNN-2002,
Aventis Pharma S.A. (FR); The Secretary, Department of Health and Human Services (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MERVIN C YODER, SHANG ZEHN ZHOU, JAIME ESCOBEDO, VARAVANI DWARKI
A01N43/04,A61K31/70,C12N15/63
                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OS Homo sapiens (human)
PN JP 2001500376-A/1
PD 16-JAN-201500376-A/1
PP 02-SEP-1997 JP 1998512823
PR 06-SEP-1996 US 60/025616,11-SEP-1996 US 60/025649 PI
ARON SILVASTAVA, SELVARANGAN PONNAZHAGAN, ROBERT H CHLOEMER, PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.4%; Score 12.8; DB 1; Length 19;
llarity 87.5%; Pred. No. 3.5e+02;
Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 3.5e+02; tive 0; Mismatches 2; Indels
                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
AX473995 19 bp
Sequence 149 from Patent WO0246458.
AX473995

    19
    organism="Homo sapiens"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="genomic_DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD006133.1 GI:18634504
JP 2001500376-A/1.
Homo sapiens (human)
Homo sapiens
                                                                           AX473995.1 GI:22208150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 805 CICCICCAACICAGGG 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 CTCCTCCATCACAGGG 1
                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 14; Conservi
                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
             LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD006133/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 242
                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·.
                                       ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                             PAT 10-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 28-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                       ..
                                                                                                                                                                                                                                                                                                                                                                                                               Dean, C. and Levy, Y.Y. Methods and means for modification of plant flowering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 4.4%; Score 12.8; DB 1; Length 19; Best Local Similarity 87.5%; Pred. No. 3.5e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 19;
                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hunt, P.J., Marshall, S.E. and Bell, J.I.
Susceptibility gene for autoimmune disease
Patent: WO 0151657-A 13 19-JUL-2001;
Isis Innovation Limited (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.4%; Score 12.8; DB 1;
87.5%; Pred. No. 3.5e+02;
tive 0; Mismatches 2;
                 87.5%; Pred. No. 3.5e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1..19
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="01igonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .19
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="texon:32630"
/noTe="Primer +1902 sense"
                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Characteristics
Patent: WO 0121822-A 46 29-MAR-2001;
Plant Bioscience Limited (GB)
Location/Qualifiers
                                                                                                                                                                                                                           AX101072 19 bp
Sequence 46 from Patent WO0121822.
AX101072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX195824 19 bp
Sequence 13 from Patent WO0151657.
AX195824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX195824.1 GI:15386126
                                                                                                                                                                                                                                                                                       AX101072.1 GI:13619928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                726 CTCTGGTCATAGGACT 741
                                                                                901 GCTTCTGCGATCAGAT 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    829 GICTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct
synthetic construct
artificial sequences.
                                                                                                                     18 degregedareagar 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        crcreeccagaeacr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 87.5
Matches 14; Conservative
                                       14; Conservative
                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX195824/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 241
AX473995/c
                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 240
```

ACCESSION VERSION KEYWORDS SOURCE

ð g REFERENCE AUTHORS JOURNAL

FEATURES

à d

ò.

Gaps

ö

.;

Gaps

0

EX

Key

PC

..

Gaps

ö

```
AB068276 19 bp DNA linear SYN 21-MAY-2003
Synthetic construct DNA, forward primer for human STS sts-R135E19R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="forward primer for human STS sts-R135E19R at 1p36 sts-R135E19R obtained from clones D1S1465, B135E19, B134E14, B377M11, Human BAC library RPCI-11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chen,Y.Z., Hayashi,Y., Wu,J.G., Takaoka,E., Maekawa,K.,
Watanabe,N., Inazawa,J., Hosoda,F., Arai,Y., Mizushima,H.,
Morohashi,A., Ohira,M., Nakagawara,A., Liu,S., Hoshi,M., Horii,A.
and Soeda,E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
Submitted (04-AUG-2001) Akira Horii, Tohoku University School of Medicine, Molecular Pathology, 2-1 Seiryomachi, Aoba-ku, Sendai, Miyagi 980-8575, Japan (E-mail:horii@mail.cc.tchoku.ac.jp, Tel:81-22-717-8047)
Location/Qualifiers
PC C12N1/21,C12N5/10,C12N5/10,C12P21/08,C12O1/68,G01N33/50,C12N15/00,C12N15/00,C12N15/00
CC C12N5/00,C12N15/00
CC potential microsequencing oligo for 99-1480-290.mis1 FH Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BAC-based STS-content map spanning a 35-Mb region of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 3.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                        4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 3.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .19
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
1. .19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19 bp I
Sequence 198 from Patent W09740193.
A67031
                                                                                                                         1. .19
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chromosome 1p35-p36
Genomics 74 (1), 55-70 (2001)
                                                                                      primer bind 1. .19.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GI:15129080
                                                                                                                                                                                                                                                                                 918 ATCATCACCACCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        799 AGAGCTCTCCTCCAAC 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 AGATCTCTCCCCCAAC 18
                                                                                                                                                                                                                                                                                                        3 ATCTTCACCACAACCC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 19)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14; Conservative
                                                                                                                                                                                                                                                14; Conservative
                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AB068276.1
                                                                                                                                                                                                                                                                                                                                                                                                                                         at 1p36.
AB068276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21269192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11374902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Horii, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                misc feature
                                                                                        FI
                                                                                                                                                                                                                Query Match
                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 246
A67031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                    RESULT 245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                    AB068276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                   20-NOV-2001
12-MAR-2001 JP 2001068285
BIICHI SOEDA
C12N15/09,C12N15/09,C12M1/00,C12Q1/68,G01N33/53,G01N33/566, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 17-JUL-2003
                                                                                                                                         PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (bases 1 to 19)
Cohen, D., Blumenfeld, M., Chumakov, I. and Bougueleret, L.
Prostatic cancer gene
Patent: JP 2002516657-A 464 11-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PD 11-JUN-2002
PF 22-DEC-1998 JP 2000525562
PF 22-DEC-1997 US 08/996306,09-SEP-1998 US 60/099658 PI
DANIEL COHEN, MARTA BLUMENFELD, 1LYA CHUMAKOV, LYDIE BOUGUELERET PC
C12N15/09,C12N15/09,A01K67/027,C07K14/47,C07K16/18,C12N1/15, PC
C12N1/19,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                A method of arraying genome clone
Patent: JP 2001321190-A 1183 20-NOV-2001;
THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH, YUGENKAISHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            표
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Description of Artificial Sequence: Synthetic DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 3.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .19
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                             DNA
                                                                                                                                                    A method of arraying genome clone.
BD088939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 bp
                                                                                                                                           19 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                   Artificial Sequence
JP 2001321190-A/1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
JP 2002516657-A/464
                                                                                                                                                                                            BD088939.1 GI:22634549 JP 2001321190-A/1183.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD196875.1 GI:33006645
                       920 CATCACCACCACCTC 935
                                                                                                                                                                                                                              synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           799 AGAGCICTCCTCCAAC 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Prostatic cancer gene. BD196875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 AGATCTCTCCCCCAAC 18
                                           CATAACCACCACGCTC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JP 2002516657-A/464.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C12N15/00
                                                                                                                                                                                                                                                                                                                                                                      GENOTECHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD196875
                                                                                                                                           BD088939
                                                                                                                                                                                                                                                                                                   Soeda, E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENSET
                                                                                                                                                                                                                                                                                                                                                                                        os
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FT
                                                      19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD196875
LOCUS
DEFINITION
                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                         RESULT 243
BD088939
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                         à
```

ö

Gaps

·.

PAT 29-MAR-1999

linear

.. 0

Gaps

0

4; Indels

Length 19;

PAT 28-JUL-1999

DNA

and Imamura, J.

```
Unclassified.

Inclass 1 to 19)
Feitchson, J. S. and Narva, K. E.
Primers and probes for the identification of bacillus thuringiensis genes and isolates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           THE STATE OF THE S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A01H5/00, C07H21/04, C12N5/10, C12N9/12, C12N15/09, (C12N5/10, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism='Artificial sequences'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Murase, M., Murase, J., Iwabuchi, M., Hayakawa, T. INCREASE IN STORED LIPID CONTENT OF PLANT SEED PATENT: JP 1997313059-A 4 09-DEC-1997, MITSUBISHI CORP, MITSUBISHI CHEM CORP OS None
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ::31/, (C12N9/12,C12R1:91), (C12N15/09,C12R1:91); strandedness: Single;
                                               Score 12.6; DB 1;
Pred. No. 3.8e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.3%; Score 12.6; DB 1; 78.9%; Pred. No. 3.8e+02; tive 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
       /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 bp
Sequence 6 from patent US 5667993.
165463.
165463.1 GI:2482033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .19
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                        19 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Artificial sequences.
                                                                                                                                                 864 CAGTIGGAACACTITCCIG 882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  782 CAGCCCTCTGGTGCCAAG 800
                                                                                                                                                                                            1 CTGTTGGCACAGTTTGCTG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 cageccerregrercase 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                topology: Linear;
hypothetical: No;
                                                  ch
1 Similarity 78.9%;
15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                    E14385.1 GI:5709068
JP 1997313059-A/4.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (bases 1 to 19)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                unidentified
unclassified.
                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PI MURAS
PI IMAM
PC 401H
C12R1:91),
PC 51ZR
CC 51ZR
CC 51ZR
CC 51ZR
CC 7DPO
CC 7DPO
CC 7DPO
FH Key
FH Key
FH KEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                                     E14385
                                                                                                                                                                                                                                                                                                                                              Primer
                                                                                                                                                                                                                                                                                                                                                                  E14385
                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 250
165463/c
                                                                                                                                                                                                                                                                        RESULT 249
E14385/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COCUS
                                                                                                                                                                                               g
                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 07-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.
Unclassified.
1 (bases 1 to 19)
Lam,J.S., Burrows,L., Charter,D. and de Kievit,T.
Proteins involved in the synthesis and assembly of O-antigen in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                    4.3%; Score 12.6; DB 1; Length 19; larity 78.9%; Pred. No. 3.8e+02; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 3.8e+02; tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unclassified.

1 (bases 1 to 19)
Pallisgaard, N. and Hokland, P.
Barlisgaard, N. and Hokland, P.
Bartent: WO 9824928-A 69 11-JUN-1998,
PALLISGAARD NIELS, (DK); HOKLAND PETER (DK)
                                        unidentified
unclassfied.
1 (bases 1 to 19)
Stuyver,L., Rossau,R. and Maertens,G.
METHOD FOR TYPING AND DETECTING HBV
Patent: WO 9740193-A 198 30-OCT-1997;
INNOGENETICS NV (BE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pseudomonas aeruginosa
Patent: US 5994072-A 25 30-NOV-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 25 from patent US 5994072.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 bp
Sequence 69 from Patent WO9824928.
A91542
A91542.1 GI:6740497
                                                                                                                                                                                                                                                                   1. .19
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .19
/organism="unidentified"
                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    730 GGTCATAGGACTTGGTAGG 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             914 GATTATCATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GGTTAAAGGTCTTTGTAGG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19 GATTGCCATAACCGCCACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR089693.1 GI:10016448
  A67031.1 GI:4538402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 78.9°
Matches 15, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unidentified
                                                                                                                                                                                                                                                                                                                                                                                                             Best_Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 248
                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                      REFERENCE
                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A91542/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR089693
                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
```

ö

Gaps

0;

4; Indels

Length 19;

PAT 07-0CT-1997

linear

DNA

```
Query Match
Best Local Similarity 78.9
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX129174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13
                               AX068847/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                            source
                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 254
AX129174/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                      ACCESSION
VERSION
                    RESULT 253
                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                                 REFERENCE
                                                                                               KEYWORDS
SOURCE
                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 엄
                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 19)
Feitelson, J.S.
Identification of, and uses for, nematicidal bacillus thuringiensis genes, toxins, and isolates
Patent: US 5670365-A 6 23-SEP-1997;
Location/Qualifiers
                                                                                                           ò
                                                                                                                                                                                                                           PAT 28-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.

1 (bases 1 to 19)

Thompson, J. E., Wang, T.-W. and Lu, D.L.

DNA encoding a plant deoxyhypusine synthase, a plant eukaryotic initiation factor 5A, transgenic plants and a method for controlling senescence programmed and cell death in plants Patent: US 6538182-A 7 25-MAR-2003;
                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                           ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                            4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 3.8e+02; tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 3.8e+02; iive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 12.6; DB 1;
Pred. No. 3.8e+02;
0; Mismatches 4;
                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                   /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                           1. .19
/organism="unknown"
/mol_type="unassigned DNA"
Patent: US 5667993-A 6 16-SEP-1997;
                                                                                                                                                                                                                       16475
Sequence 6 from patent US 5670365.
166475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGUENCE 7 from patent US 6538182.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
         Location/Qualifiers
1..19
                                       /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
                                                                                                                              920 CATCACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              920 CATCACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            914 GATTATCATCACCACC 932
                                                                                                                                                    19 CATCCCCACCTTCCTCCGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATCCCACCTTCCTCCGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATCTTCCTCAACACCACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR301904.1 GI:31689766
                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.3%;
                                                                                                                                                                                                                                                            I66475.1 GI:2724452
                                                                      Query Match
Best Local Similarity 78.9°
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR301904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR301904
                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                           source
                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 252
AR301904/c
LOCUS
DEFINITION
 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                             RESULT 251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
            FEATURES
                                                                                                                                                                                                            I66475/c
                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                              ð
                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
PAT 25-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 15-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 15-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                 Thompson, J.E., Wang, T.W. and Lu, D.L.

Dna encoding a plant deoxyhypusine synthase, a plant eukaryotic
initiation factor 5a, transgenic plants and a method for
controlling senescence and programmed cell death in plants
Patent: WO 0102592-A 7 11-JAN-2001;
Senesco, Inc. (US)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Robbins,J.M. and Tritz,R.
Ribozyme therapy for the treatment of proliferative skin and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·.
                                                                                                                                                                                                                                                                                                                                                                                                                             Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 19;
       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
/noTe="CdK3 ribozyme binding site"
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
4.3%; Score 12.6; DB 1;
Best Local Similarity 78.9%; Pred. No. 3.8e+02;
Matches 15; Conservative 0; Mismatches 4;
                                                                                                                                                                                                                                                                                                       1. .19
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 12.6; DB 1;
Pred. No. 3.8e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent: WO 0130362-A 392 03-MAY-2001,
IMMUSOL, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2896 from Patent WO0130362. AXI31678 GI:14137983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX129174 19 bp 1
Sequence 392 from Patent W00130362.
Sequence 7 from Patent W00102592. AX068847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            914 GATTATCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         857 CTGGCTCCAGTTGGAACAC 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 GATCTTCCTCAACACCACC 1
                                                         AX068847.1 GI:12578700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX129174
AX129174.1 GI:14135479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.3%;
                                                                                                                                     artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGCTCCAGATTGGGCAC
                                                                                              synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 255
AX131678
LOCUS
DEFINITION
ACCESSION
VERSION
```

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 259
AX588005/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
               source
                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                            RESULT 258
AX362785/c
                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
FEATURES
                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                   à
                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 06-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·,
                                                                                                                                                                                                                                                                                                         ..
                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 26-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hugot,J.P., Thomas,G., Zouali,M., Lesage,S. and Chamaillard,M.
Genes involved in intestinal inflammatory diseases and use thereof
Patent: WO 0172822-A 68 04-OCT-2001;
Fondation Jean Dausset-Ceph (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                          Robbins, J.M. and Tritz, R. Ribozyme therapy for the treatment of proliferative skin and eye diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
                                                                                                                                                                                                                                                                                                         ÷
                                                                                                                                                                                                                                                                       4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 3.8e+02; tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 12.6; DB 1; Length 19;
Pred. No. 3.8e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                   /organism="Homo sapiens"
/mol Lype="unassigned DNA"
| Da xref="taxon:9606"
/noFe="Cyclin H ribozyme binding site"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Loukachov,V.V., van Gemen,B. and Goudsmit,J. Collection of binding molecules
Patent: EP 1174:18-7, 146 23-JAN-2002;
Amsterdam Support Diagnostics B.V. (NL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                     Patent: WO 0130362-A 2896 03-MAY-2001;
IMMUSOL, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 bp 1
Sequence 146 from Patent BP1174518.
AX352940.
AX352940.1 GI:18618022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 68 from Patent WO0172822.
AX259841

    .19
    /organism="Homo sapiens"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  891 TTACTTCTCAGCTTCTGCG 909
                                                                                                                                                                                                                                                                                                                                        934 TCCAGAGAATTTTACGCAA 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rregricicacticedece 19
                                                                                                                                                                                                                                                                                                                                                                     rccagagarrrrgaggaaa 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX259841.1 GI:16508915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15; Conservative
                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                        1. .19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                    Homo sapiens
                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                            15;
                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 257
AX352940/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                 REFERENCE
                                                                                               AUTHORS
                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                     AX259841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
                                                                                                               TITLE
                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                        g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 10-JAN-2003
                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                               PAT 15-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Thompson, J.E., Wang, T.W. and Lu, D.L.
Dna encoding a plant deoxyhypusine synthase, a plant eukaryotic
initiation factor 5a, transgenic plants and a method for
controlling senescence programmed and cell death in plants
Patent: WO 0244392-A 7 06-410.
Senesco Technologies, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .,
                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 19;
                                                                                                                                 Score 12.6; DB 1; Length 19; Pred. No. 3.8e+02; 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 12.6; DB 1; Length 19;
Pred. No. 3.8e+02;
                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Loukachov, V.V., Goudsmit, J. and van Gemen, B. Collection of binding molecules
Patent: WO 0208463-A 146 31-JAN-2002;
Amsterdam Support Diagnostics B.V. (NL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.3%; Score 12.6; DB 1; 78.9%; Pred. No. 3.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. 19 /organism="synthetic construct" /organism="synthetic construct" /mol_type="unassigned DNA" /db xref="teaxon:32630" /note="position:67"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                   1..19
/organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
/note="position 67"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                 AX362785
Sequence 146 from Patent WO0208463.
AX362785.
AX362785.1 GI:18694925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 bp
Sequence 7 from Patent WO0244392.
AX588005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           821 TIGGCIGICICITITICE 839
                                                                                                                                                                                                                          821 TIGGCIGIGICICITITCI 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 TIGIACIGICITITICI 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'note="primer"
                                                                                                                                                                                                                                                                  19 rregraciercrirricr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX588005.1 GI:27656667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.3%;
78.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                           Query Match
Best Local Similarity 78.9%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 78.9
Matches 15; Conservative
```

à

```
Strandedness: Single;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C12N15/00
                                                                                                                                                                                                                                                                                                                           BD089310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Okada, N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OS
PD
PP
PF
PC
PC
S S #
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    弫
                                                             source
                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 263
BD188519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                  RESULT 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                BD089310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 27-AUG-2002
                                                                                                                                   PAT 27-AUG-2002
   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta, Pepernatophyta; Magnoliophyta, eddicotyledons, core eudicots, rosids, eurosids I, Fabales, Fabaceae; Papilionoideae, Trifolieae, Medicago.
                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 19)
Parisgard,N. and Hokurando,P.
Method for detecting abnormality in chromosome
Patent: JP 2001505428-A 69 24-APR-2001;
NEILLS PARISGARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD061183 19 bp DNA linear PAT 27-AUG-
Composition and method for inducing an immune response against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Laus.R., Ruegg,C., Shapero,M.H. and Yang,D. Composition and method for inducing an immune response against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PF 10-APR-1998 JP 1998544103
PR 11-APR-1997 US 60/043301
PI REINER LAUS, CURTIS RUGGG, MICHAEL H SHAPERO, DEMAO YANG PC C12N15/55, C12N9/16, C12N15/86, AG1X38/46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·.
   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 3.8e+02; ative 0; Mismatches 4; Indels
                                                                                                                                   linear
   Indels
                                                                                                                                   BD023324 11ne
Method for detecting abnormality in chromosome.
                                                                                                                                                                                                                                                                                                                                        JP 2001505428-A/69
24-APR-2001
08-DEC-1997 JP 1998525090
NEILLS PARISGARD, PATER HOKURANDO
C12N15/09.C12Q1/66,G01N33/50,C12N15/00
Strandedness: Single;
    4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tumor-related antigens
Patent: JP 2001516226-A 9 25-SEP-2001;
DBNDREON CORP
PN JP 2001516226-A/9
PD 25-SEP-2001
 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .19
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                           Topology: Linear;
/desc = 'DNA (synthetic)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         914 GATTATCATCACCACC 932
                              914 GATTATCATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 GATTGCCATAACCGCCACC 1
                                                     GATCTTCCTCAACACCACC 1
                                                                                                                                                                           BD023324.1 GI:22564547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD061183.1 GI:22606789
JP 2001516226-A/9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         tumor-related antigens.
BD061183
                                                                                                                                                                                         JP 2001505428-A/69.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 19)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Medicago sativa
Medicago sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Thes 15; Conserve
                                                                                                                                                             BD023324
   15;
                                                                                                                                                                                                                                                                                                                                           BDD23324/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                       ORGANISM
                                                                                                       RESULT 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
   Matches
                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BD061183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
```

d

à

```
C12N15/09, C12N15/09, C12M1/00, C12Q1/68, G01N33/53, G01N33/566, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .<u>.</u>
                                                                                                                                                                          .
                                                                                                                                                                                                                                                                                                                                   PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A method of arraying genome clone
Patent: JP 2001321190-A 1554 20-NOV-2001;
THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH, YUGENKAISHA
GENOTECHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŀН
                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CANIS/00
Description of Artificial Sequence:Synthetic DNA
Location/Qualifiers
                                                                                                                                          Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 19;
                                                                                                                                                                          4; Indels
                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.3%; Score 12.6; DB 1; 78.9%; Pred. No. 3.8e+02; iive 0; Mismatches 4;
                                                                                                                                      Score 12.6; DB 1;
Pred. No. 3.8e+02;
0; Mismatches 4;
                  Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="synthetic construct"
/mol_type="genomic DNA"
/db xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                   DNA
                                                                   /organism="Medicago sativa"
/mol_type="genomic DNA"
/db_xref="taxon:3879"
                                                                                                                                                                                                                                                                                                                                 BD089310 19 bp A method of arraying genome clone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Artificial Sequence
JP 2001321190-A/1554
20-NOV-2001
12-MAR-2001 JP 2001068285
                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      . .19
                                                                                                                                                                                                           887 GCACTTACTTCTCAGCTTC 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   786 CCCTCTGGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CACTCTGTTGCCCAGTGCT 19
                                                                                                                                                                                                                                            GCACTTCCTGCTGAGCTCC 19
                                                                                                                                                                                                                                                                                                                                                                                      BD089310.1 GI:22634920
Topology: Linear;
Key
                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 19)
                                                                                                                                      Query Match
Best Local Similarity 78.9%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                      JP 2001321190-A/1554.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 19)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 4.3
Best Local Similarity 78.9
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EIICHI SOEDA
```

```
1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                         RESULT 266
                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 268
AX637431/c
                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR370354
                                                                                                                                                                                      AR130732
                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 15)
Sullivan, S., Draper, K., Kisich, K., Stinchcomb, D.T. and McSwiggen, J.
TNF-.alpha. ribozyman.
Patent: US 5811300-A 737 22-SEP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
Unknown.
Unclassified.
Unclassified.
Sullivan,S., Draper,K., Kisich,K., Stinchcomb,D.T. and McSwiggen,J.
TNF-.alpha. ribozymes
Patent: US 5811300-A 738 22-SEP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 25-SEP-1999
Method for distinguishing specie of animal by SINE method Patent: JP 2003009866-A 256 14-JAN-2003;
THE CIRCLE FOR THE PROMOTION OF SCIENCE AND ENGINEERING ARTIficial Sequence
DA ARTIficial Sequence
PD 14-JAN-2003
PD 14-JAN-2003
PP 24-APP-201 JP 2001126667
PI NORIHIRO OKADA
PC C12015/09,C1201/68,G01N33/50,G01N33/50,G01N33/566,
                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
                                                                                                                                                                      ce 1.19
/organism='Artificial Sequence'.
Location/Qualifiers
                                                                                                                                                                                                                                                                        4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 3.8e+02; Live 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ch 4.3%; Score 12.4; DB 1; Length 15; ll Similarity 92.9%; Pred. No. 3.1e+02; 13; Conservative 0; Mismatches 1; Indels
                                                                                                                          C12N15/00
C12N15/00
CHR-1 Type I CHR-1 R oligonucleotide for PCR
Kev Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                            1..19
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 737 from patent US 5811300. AR041947. GI:5962443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 bp D1 Sequence 738 from patent US 5811300. AR041948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .15
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                          894 CITCICAGCITCIGCGAIC 912
                                                                                                                                                                                                                                                                                                                                          1 CTGCACAGCTTGTGGGATC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840 TCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14 TGTCTGAAGACAGC 1
                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                    G06F17/30,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
Unclassified.
                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                        RESULT 264
AR041947/c
LOCUS
                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR041948/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
SOURCE
                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                           à
```

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                     PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 12-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 15)
Nielsen, P.E. and Good, L.
Antibacterial and antibiotic methods using peptide nucleic acids and pharmaceutical compositions therefor Patent: US 6300318-A 19 09-0CT-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                  Unthrown.
Unclassified.
1 (bases 1 to 15)
Nielsen, F.E. and Good, L.
Nielsen, P.E. and gene function determination using peptide nucleic acids
Patent: US 6190866-A 19 20-FEB-2001;
Location/Qualifiers
                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                       ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·,
Query Match
4.3%; Score 12.4; DB 1; Length 15;
Best Local Similarity 92.9%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.3%; Score 12.4; DB 1; Length 15; 86.7%; Pred. No. 3.1e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.3%; Score 12.4; DB 1; Length 1
86.7%; Pred. No. 3.1e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 from patent US 6300318.
                                                                                                                                                                                                15 bp
Sequence 19 from patent US 6190866.
AR130732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                        AR130732.1 GI:14119057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR370354.1 GI:34606882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    830 TCTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 referentiates 15
                                                                         840 TCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 TCTCTTTNTTTCTCT 15
                                                                                                           14 TGTCTGAAGACAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 86.79
Marches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              830 TCTCTTTTCTTCTCT
```

.; 0

Gaps

; 0

PAT 12-SEP-2003

linear

ACCESSION VERSION KEYWORDS

SOURCE

REFERENCE AUTHORS JOURNAL

TITLE

FEATURES

```
Diagnostic and therapeutic methods based on the 11 adhesion molecule for ovarian and endometrial tumors
Patent: WO 0204952-A 12 17-JAN-2002;
Deutsches Krebsforschungszentrum Stiftung des Oeffentlichen Rechts (DE); MOR-RESEARCH APPLICATIONS LTD. (IL)
Location/Qualifiers
                                                                                         1 (bases 1 to 16)
Norden, B., Wittung, P., Buchardt, O., Egholm, M., Nielsen, P.E. and
                                                                                                                                                                                                                                                                                  Query Match 4.3%; Score 12.4; DB 1; Length 16; Best Local Similarity 92.9%; Pred. No. 3.4e+02; Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.3%; Score 12.4; DB 1; Length 16; 92.9%; Pred. No. 3.4e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassification (16)
Buchardt, O., Egholm, M., Nielsen, P.E. and Berg, R.H.
Peptide nucleic acids
Patent: US 6395474-A 33 28-MAY-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="synthetic construct"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                               Berg,R.
Double-stranded peptide nucleic acids
Patent: US 6228982-A 36 08-MAY-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR371296 16 bp I Sequence 33 from patent US 6395474.
                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX370480 16 bp Sequence 12 from Patent WO0204952.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
                                                                                                                                                                                                                               /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Altevogt, P. and Fogel, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR371296.1 GI:34608228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX370480.1 GI:18857522
 GI:15115207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                  829 GTCTCTTTCTTCT 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        829 GICTUITITUTE 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 Greacriricricr 3
                                                                                                                                                                                                                                                                                                                                                                                        16 GTCACTTTTCTTCT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 13; Conserv
AR150616.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX370480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR371296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown
                                     Unknown
                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 271
AR371296/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 272
AX370480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                               AUTHORS
                                                                                               REFERENCE
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 08-AUG-2001
                                                                                                                                                                                                                                                                    Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 21-FEB-2003
 PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.W., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                       Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kiski, K., Matullic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.W., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.3%; Score 12.4; DB 1; Length 15; 92.9%; Pred. No. 3.1e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 15,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match

4.3%; Score 12.4; DB 1;
Best Local Similarity 92.9%; Pred. No. 3.1e+02;
Matches 13; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent: EP 1260586-A 4571 27-NOV-2002; RIBOZYME PHARMACEUTICALS, INC. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                        Patent: EP 1260586-A 4570 27-NOV-2002; RIBOZYME PHARMACEUTICALS, INC. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 bp RN
Sequence 4571 from Patent BP1260586.
AX637432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unidentified"
/mol_type="unassigned RNA"
/db xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 bp 1
Sequence 36 from patent US 6228982.
AR150616
   15 bp R
Sequence 4570 from Patent EP1260586.
                                                                                                                                                                                                                                                                                                                                                                                    /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX637432.1 GI:28473046
                                                           AX637431.1 GI:28473045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840 TCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840 TCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14 rgrcrgaagacage 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 92.94
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14 rerergaagacage 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unidentified
unidentified
unclassified.
                                                                                                                                     unclassified.
                                                                                                 unidentified
                                                                                                                     unidentified
                                                                                                                                                                                                                                                         Woolf, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Woolf, T.
                                         AX637431
                                                                                                                                                                                                                                                                                            genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                        source
   LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR150616/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 270
                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX637432/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 269
```

ACCESSION VERSION

ð 윤 KEYWORDS

SOURCE

REFERENCE AUTHORS

JOURNAL

TITLE

FEATURES

à q

. 0

Gaps

; 0

PAT 16-FEB-2002

0;

;

PAT 29-SEP-1999

linear

REFERENCE

JOURNAL

COMMENT

à g

```
1 (bases 1 to 17)
Roy,S. and Vehar,G.A.
Tissue factor mutants useful for the treatment of myocardial infarction and cloagulopathic disorders
Patent: US 5739101-A 3 14-ARR-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.
1 (bases 1 to 17)
Grimm,S., Stinchcomb,D.T., McSwiggen,J., Sullivan,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 17)
Grimm, S., Stinchcomb, D.T., McSwiggen, J., Sullivan, S. and
Draper, K.G.
Intercellular adhesion molecule-1 (ICAM-1) ribozymes
Patent: US 5837542-A 1773 17-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ostum.r., ...
Intercellular adhesion molecule-1 (ICAM-1) ribozymes
Patent: US 5837542-A 1683 17-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                     4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Match
Local Similarity 92.9%; Pred. No. 3.6e+02;
es 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 4.3%; Score 12.4; DB 1; Length 17; Best Local Similarity 92.9%; Pred. No. 3.6e+02; Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1773 from patent US 5837542. AR057569.1 GI:5983146
                                                                                                                                                                                                                                                                                                                                                                                          17 bp DN;
US 5837542.
                                                                                                                                                   /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .17
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                 /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1683 from patent AR057479
                                                                                                                                                                                                                                                                                                                                                                                                                                           AR057479.1 GI:5983056
                                                                                                                                                                                                                                                            871 AACACTTTCCTGAG 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           866 GTTGGAACACTTTC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               866 GITGGAACACITIC 879
                                                                                                                                                                                                                                                                                              2 AACACTTTCCTAAG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14 GTTGGAACATTTTC 1
                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.
                                                                                                                                                                                                      Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                        AR057479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S:
Matches 13
                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                   RESULT 275
AR057479/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR057569/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
FEATURES
                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Пр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                  BD198664 17-JUL-2003
Method and reagent for treating diseases or conditions concerning
molecule participating in vasculogenic response.
BD198664.1 GI:33008434
JP 202509721-A/1690.
Homo sapiens (human)
                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ALTERIATE STATES (human)
PN JP 2002509721-A/1690
PD 02-APR-1999 JP 2000541291
PR 27-MAR-1999 US 60/079678
PI PAMBLA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, PI JAMES A MCSWIGGEN
PT JOSS A GARAI/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AG1P29/00,
PC A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ó.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 04-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 17)

Pavco,P.A., Roberts,E., Jarvis,T., Coeshott,C. and Mcswiggen,J.A.
Method and reagent for treating diseases or conditions concerning
molecule participating in vasculogenic response
Patent: JP 2002509721-A 1690 02-APR-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Method and reagent for treating diseases or conditions
                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism='Homo sapiens (human)'. Location/Qualifiers
                                                   Query Match
4.3%; Score 12.4; DB 1; Length 16;
Best Local Similarity 92.9%; Pred. No. 3.4e+02;
Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
4.3%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Method and teapon... ---
Concerning molecule
participating in vasculogenic response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR001349 17 bp
Sequence 3 from patent US 5739101.
AR001349 GI:3563416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
/db_xref="taxon:32630"
/note="primer"
                                                                                                                          711 GTCCCAGGAGAGTG 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               803 CTCTCCTCCAACTC 816
||||||||||||||||||17 CTCTCCTCGAACTC 4
                                                                                                                                                                Grecergaagagig 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ည
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EEEE EEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                        LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                       BD198664/c
                                                                                                                                                                                                                   RESULT 273
                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 274
```

·;

Gaps

0;

PAT 29-SEP-1999

linear

0

Gaps

0;

AR001349 LOCUS

g

FEATURES

ó

Gaps

.

PAT 16-MAY-2001

linear

```
3 Homo sapiens (human)
N JP 2002525127-A/55
D 13-AMC-2002
F 24-SEP-1999 JP 2000572407
R 25-SEP-1998 US 60/101757
I JOHN E LANDERS, BARBARA JORDAN, DAVID E HOUSMAN, ALAIN CHAREST PC C12N15/09, C12Q1/68, G01N33/53, G01N33/566, G01N33/58, G01N37/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD241108 17-JUL-2003 NA linear PAT 17-JUL-2003 Methods and products related to genotyping and DNA analysis.
                                Disper, K.G.
Ribozyme treatment of diseases or conditions related to levels of intercellular adhesion molecule-1 (ICAM-1)
Patent: US 6132967-A 1773 17-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Draper,K.G. Thibozyme treatment of diseases or conditions related to levels of intercellular adhesion molecule-1 (ICAM-1)
Patent: US 6132967-A 1855 17-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates; Catarrhini, Hominidae, Homo.

1 (Dases 1 to 17)

Landers, J.E., Jordan, B., Housman, D.E. and Charest, A.

Methods and products related to genotyping and DNA analysis Patent: JP 2002225127-A 55 13-AUG-2002;

MASSACHUSETIS INSTITUTE OF TECHNOLOGY
     1 (bases 1 to 17)
Grimm,S., Stinchcomb,D.T., McSwiggen,J., Sullivan,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 17)
Grimm,S., Stinchcomb,D.T., McSwiggen,J., Sullivan,S. and
                                                                                                                                                                                      Score 12.4; DB 1; Length 17;
Pred. No. 3.6e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                 Sequence 1855 from patent US 6132967. AR115409 AR115409.1 GI:14095731
                                                                                                                        1. .17
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD241108.1 GI:33050878
JP 2002525127-A/55.
Homo sapiens (human)
                                                                                                                                                                                      ch
1 Similarity 92.9%;
13; Conservative
                                                                                                                                                                                                                                                        866 GITGGAACACITIC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           866 GIIGGAACACITIC 879
                                                                                                                                                                                                                                                                             14 Griggaacarrire 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD241108
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OS
PD
PF
PR
PR
                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                       RESULT 280
AR115409/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD241108/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 281
                                                                                       JOURNAL
      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                       Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q
                                                                                                     PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                        .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 17)
Draim, S., Stinchcomb, D.T., McSwiggen, J., Sullivan, S. and Draper, K.G.
Ribozyme treatment of diseases or conditions related to levels of intercellular adhesion molecule-1 (ICAM-1)
Patent: US 6132967-A 1683 17-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                Unclassified.
1 (bases 1 to 17)
Grimm, S., Stinchcomb, D.T., McSwiggen, J., Sullivan, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                 Draper.K.G.
Intercellular adhesion molecule-1 (ICAM-1) ribozymes
Patent: US 5837542-A 1855 17-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                    Score 12.4; DB 1; Length 17;
Pred. No. 3.6e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.3%; Score 12.4; DB 1;
ilarity 92.9%; Pred. No. 3.6e+02;
Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1773 from patent US 6132967. AR115327
                                                                                                    AR057651
Sequence 1855 from patent US 5837542.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ARI15237 17 bp DNA Sequence 1683 from patent US 6132967.
                                                                                                                                                                                                                                                                                                                                      1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR115237
AR115237.1 GI:14095559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR115327.1 GI:14095649
                                                                                                                                                      AR057651.1 GI:5983228
                                                                                                                                                                                                                                                                                                                                                                                                  4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     866 GTTGGAACACTTTC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        866 GIIGGAACACITIC 879
Query Match
Best Local Similarity 92.99
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14 GTTGGAACATTTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14 Grrggaacarrirc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                      AR057651
                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown,
                      14
                                                                                                                                                                                                                                                                                                                                       source
                                                                   RESULT 277
AR057651/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                     DEFINITION
                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 278
AR115237/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR115327/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                    ACCESSION
                                                                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
```

à

ò g

·.

Gaps

0

```
Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 285
AX226659/C
LOCUS
DEFINITION
VERSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                AX226658/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                  RESULT 284
                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
           C12N15/00
Methods and products related to genotyping and DNA analysis FH
Evalifiers
                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 24-NOV-2000
                                                                                                                                                                                                                                                                                                                                                       PAT 06-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcleod,R.W., Roberts,C., Roberts,F., Johnson,J., Kirisits,M., Ferguson,D., Lyons,R., Mui,E., Haselkorn,R., Mack,D., Samuel,B., Gornicki,P. and Zuther,B.
Anti-microbial agents, diagnostic reagents, and vaccines based on apicomplexan parasite components
Patent: WO 0066154-A 36 09-NOV-2000;
Arch Development Corporation (US); MRJ Trust (US); Mcleod, Rima W. (US); Roberts, Craig (GB); Roberts, Fiona (GB); Johnson, Jennifer (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 17)
Roy, S. and Vehar, G.A.
Roy, S. and Vehar, G.A.
DNA encoding tissue factor mutants useful for the treatment of myocardial infarction and coagulopathic disorders
Patent: US 589363-A 3 31-DEC-1996;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                     /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 4.3%; Score 12.4; DB 1; Length 17; Best Local Similarity 92.9%; Pred. No. 3.6e+02; Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                               Query Match
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX045194 17 bp
Sequence 36 from Patent WO0066154.
AX045194
                                                                                                                                                                                                                                                                                                                                                 17 bp
Sequence 3 from patent US 5589363.
132829.
132829.1 GI:1823620
                                                                                                         1. .17
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX045194.1 GI:11343779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                             819 GGTTGGCTGTGTCT 832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               871 AACACTTTCCTGAG 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 AACACTTTCCTAAG 15
                                                                                                                                                                                                                                                                17 GGCTGGCTGTGTCT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
G01N37/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                            Key
              200
                                                           댎
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 283
AX045194/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                         RESULT 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                         132829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                            Dp
                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

```
0
                                                                                                                              ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                       PAT 10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk l) enzyme Patent: WO 0157206-A 31 09-AUG-2001; Pattaey, Ali R. (US) RIBOZYME PHARMACEUTICALS, INC. (US); Fattaey, Ali R. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk l) enzyme
Patent: WO 0157206-A 30 09-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Fattaey, Ali R. (US)
Location/Qualifiers
                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                        Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 4.3%; Score 12.4; DB 1; Best Local Similarity 92.9%; Pred. No. 3.6e+02; Matches 13; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 12.4; DB 1;
Pred. No. 3.6e+02;
0; Mismatches 1;
                                                                                    Ouery Match

4.3%; Score 12.4; DB 1;
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                           RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RNA
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer"
                                                                                                                                                                                                                                                                                                           AX226658 17 bp
Sequence 30 from Patent WO0157206.
AX226658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX226659 17 bp 28cguence 31 from Patent W00157206. AX226659 GI:15555800
                                                                                                                                                                                                                                                                                                                                                                                   AX226658.1 GI:15555799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        935 CCAGAGAATTTTAC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      935 CCAGAGAATTTTAC 948
                                                                                                                                                                           822 TGGCTGTGTCTTT 835
                                                                                                                                                                                                 16 TGGCTGTTTCTCTT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15 CCATAGAATTTTAC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14 ccaracaarritac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13; Conservative
```

```
Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Woolf.
                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                          RESULT 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 290
AX634507/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                         AX531610
                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q
                                PAT 10-SEP-2001
                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 22-NOV-2002
                                                                                                                                                    Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S.
Method and reagent for the inhibition of checkpoint kinase-1 (chk
                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                  (ns)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent: WO 0157206-A 1061 09-AUG-2001,
RIBOZYME PHARMACEUTICALS, INC. (US) ; Fattaey, Ali R. (US)
                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                           Patent: WO 0157206-A 906 09-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Fattaey, Ali R. Location/Qualifiers
                                                                                                                                                                                                                                                                                                            13*; Score 12.4; DB 1; Length 17; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 4.3%; Score 12.4; DB 1; Length 17; Best Local Similarity 92.9%; Pred. No. 3.6e+02; Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                      /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                              RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1061 from Patent W00157206. AX227689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1113 from Patent EP1239051. AX531604
                          AX227534
Sequence 906 from Patent WO0157206.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                     AX227534.1 GI:15556675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX227689.1 GI:15556830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX531604.1 GI:25254998
                                                                                            synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                   935 CCAGAGAATTTTAC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              799 AGAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                       17 CCATAGAATTTTAC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 AAAGCTCTCCTCCA 4
                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                1) enzyme
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1) enzyme
                                                         AX227534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX531604
          AX227534/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX227689/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
                                                                                                          ORGANISM
RESULT 286
                                                     ACCESSION
VERSION
                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 288
AX531604
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                 KEYWORDS
SOURCE
                                                                                                                                       REFERENCE
                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Method and reagent for inhibiting the expression of disease related
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweeller, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                      Query Match
4.3%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                 Shannon, M.
Human posh-like protein 1
Patent: EP 1239051-A 1113 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human posh-like protein 1
Patent: EP 1239051-A 1119 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent: BP 1260586-A 1646 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX531610 17 bp DN Sequence 1119 from Patent EP1239051.
AX531610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1646 from Patent EP1260586. AX634507
                                                                                                                                                                                        1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX531610.1 GI:25255010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX634507.1 GI:28470121
                                                                                                                                                                                                                                                                                                                                                                                                      744 GTAGGGTCCCAGGG 757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         747 GGGTCCCAGGGTCC 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 GTAGGGCCCCAGGG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GGGCCCAGGGTCC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 92.9
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
```

·,

Gaps

0;

1; Indels

Length 17;

PAT 08-MAY-2003

linear

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                              Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.3%; Score 12.4; DB 1; Length 17; ilarity 92.9%; Pred. No. 3.6e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; ive 0; Mismatches 1; Indels
                                                      / Match 12.4; Score 12.4; DB 1; Local Similarity 92.9%; Pred. No. 3.6e+02; nes 13; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         medicines
Patent: WO 03025175-A 1909 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent: WO 03025176-A 3448 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX730275 17 bp DNA Sequence 1909 from Patent W003025175. AX730275 4X730275.1 GI:30509618
                                                                                                                                                                                                                                                AX725761 17 bp DNA
Sequence 3448 from Patent WO03025176.
AX725761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned_DNA"
/db_xref="taxon:10090"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .17
/organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                         Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                        AX725761.1 GI:30505104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    708 CGAGTCCCAGGAGA 721
                                                                                                                                    866 GITGGAACACTITC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 CAAGTCCCAGGAGA 3
                                                                                                                                                                   14 GTTGGAACATTTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 13; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               medicines
                                                            Query Match
Best Local S:
Matches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                              AX725761/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 294
AX730275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                               RESULT 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                        d
                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Woolf, \Gamma . Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Woolf, \!T\! . Method and reagent for inhibiting the expression of disease related
                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                            PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpelsky, A., Draper, K.G., Kislch, K., Matulic-Adamic, J., Mosaviggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.W., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                           0
                                                                                                 4.3%; Score 12.4; DB 1; Length 17; ilarity 92.9%; Pred. No. 3.6e+02; Conservative 0; Mismatcher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; Ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   genes
Patent: EP 1260586-A 1891 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent: EP 1260586-A 1728 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp R1
Sequence 1891 from Patent BP1260586.
AX634752
AX634752.1 GI:28470366
                                                                                                                                                                                                                                                                                                                            AX634589 1728 from Patent EP1260586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                            organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                AX634589.1 GI:28470203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         866 GTTGGAACACTTTC 879
                                                                                                                                                                                                14 GTTGGAACATTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                           unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                           unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                           Best_Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                     AX634589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                genes
                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX634752/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                  AX634589/c
                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                               RESULT 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                      ð
```

.. 0

Gaps

0

PAT 08-MAY-2003

linear

ô

Gaps

ö

AX730886/c

ACCESSION VERSION KEYWORDS SOURCE

RESULT 295

à

ORGANISM

REFERENCE AUTHORS

TITLE

JOURNAL

FEATURES

PAT 08-MAY-2003

linear

```
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                    Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A 1223 27-WAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualiflers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A 3245 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 4.3%; Score 12.4; DB 1; Length 17; Best Local Similarity 92.9%; Pred. No. 3.6e+02; Matches 13; Conservative 0; Mismatches 1: Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; ative 0; Mismatches 1; Indels
    Sequence 1223 from Patent W003025177. AX735633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 3245 from Patent W003025177. AX737655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX757511 17 bp Dr
Sequence 832 from Patent W003040369.
AX757511
                                                                                                                                                                                                                                                                                                                                                  1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                AX735633.1 GI:30514910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX737655.1 GI:30516943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX757511.1 GI:32252127
                                                                                                        Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               950 CAAGAAGAGCCAAA 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  782 CAGCCCCTCTGGTG 795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 CAATAAGAGCCAAA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 cagccccrcrccas 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Si
Matches 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
      LOCUS
DEFINITION
                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 298
AX737655/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 299
                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                       JOURNAL
                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX757511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                         PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                     Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A 304 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; ative 0; Mismatches 1; Indels
                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 12.4; DB 1;
Pred. No. 3.6e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                            medicines
Patent: WO 03025175-A 2520 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                       17 bp DNA WO03025175.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp Di
Sequence 304 from Patent W003025177.
AX734714
AX734714.1 GI:30513991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                   AX730886
Sequence 2520 from Patent AX730886
                                                                                                                                                                                              AX730886.1 GI:30510229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 92.98;
930 ACCCTCCAGAGAT 943
                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 954 AAGAGCCAAATTGA 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              909 GATCAGATTATCAT 922
                           2 ATCCTCCAGAGAAT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GATCTGATTATCAT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 AAGAACCAAATTGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 92.9°
Matches 13; Conservative
                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 296
AX734714
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                   LOCUS
```

Matches

à qq ORGANISM

KEYWORDS SOURCE

AUTHORS TITLE

JOURNAL

FEATURES

REFERENCE

ACCESSION VERSION

0

Gaps

0

Indels

PAT 08-MAY-2003

linear

; 0

Gaps

.; 0

PAT 25-JUN-2003

linear

RESULT 297 AX735633

0;

Gaps

.; 0

PAT 31-JAN-2002

REFERENCE AUTHORS TITLE

JOURNAL

FEATURES

```
Oligomers which inhibit expression of interleukin genes.
BD008669
BD008669.1 GI:18637042
JP 2001503620-A/6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unclassified.

1 (bases 1 to 17)

1 (bases which inhibit expression of interleukin genes patent: JP 2001503620-A 6 21-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 17)
Veerapanane, D., Hamanaka, S. and Nozawa, I.
Veerapanane, D., Hamanaka, S. and Nozawa, I.
Oligomers which inhibit expression of interleukin genes
Patent: JP 2001503620-A 2 21-MAR-2001;
HISAMITSU PHARMACEUTICAL CO INC
OS Unidentified
PN JP 2001503620-A/2
PD 21-MAR-2001
PP 29-AUG-1997 JP 1998520446
                                                                                                                                                                                                                                                                                                                                                        bυυυθ655 linear PAT
Oligomers which inhibit expression of interleukin genes.
BD008665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.3%; Score 12.4; DB 1; Length 17; llarity 92.9%; Pred. No. 3.6e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                  4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DANGE VEERAPANANE, SHOJI HAMANAKA, IWAO NOZAWA
CO7H21/04,AG1K39/00,A61K48/00
Strandedness: Double;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'organism='Unidentified'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
Patent: WO 03040369-A 3369 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                            1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                          BD008655.1 GI:18637038
JP 2001503620-A/2.
unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Topology: Linear;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    831 CICITITICITICE 844
                                                                                                                                                                                                                                     909 GATCAGATTATCAT 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 92.99
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best_Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD008669/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                    RESULT 302
BD008665
                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Homo sapiens
Eukaryota; Mstazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butharia; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                              Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                              Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; atrive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                             Query Match
4.3%; Score 12.4; DB 1; Length 17;
Best Local Similarity 92.9%; Pred. No. 3.6e+02;
Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: WO 03040369-A 2020 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3369 from Patent W003040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX758699 17 bp DNA
Sequence 2020 from Patent WO03040369.
AX758699
                                                                                                                                          Patent: WO 03040369-A 832 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                       /mol_type="unassigned_DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                         /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX758699.1 GI:32253315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX760048.1 GI:32254664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      976 ATCTGGTGTATGGG 989
                                                                                                                                                                                                                                                                                                                                                                              921 ATCACCACCACCT 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 Arcrecrerared 15
                                                                                                                                                                                                                                                                                                                                                                                                          2 ATCACCACCAACCT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sonrce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                           source
```

ORGANISM

KEYWORDS

SOURCE

VERSION

REFERENCE AUTHORS

TITLE

JOURNAL

FEATURES

RESULT 300

à g AX758699 LOCUS

0

Gaps

. 0

ORGANISM

KEYWORDS

SOURCE

AUTHORS TITLE

REFERENCE

RESULT 301

g ð

AX760048 LOCUS

Matches

```
JP 2002509721-A/5869.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  821 TIGGCIGIGICICT 834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 TIGGCTITGICICT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD202843
                                                                                                                                                                                                                                                       OS
PN
PD
PF
                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                             임품료료
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 306
BD202843
                RESULT 305
                                                      DEFINITION
                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                          BD202842
LOCUS
                                                                                ACCESSION
                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kit and method for determining HLA type
Patent: WO 0192572-A 988 06-DEC-2001;
NISSHINBO INDUSTRIES INC, SYSTEM RESEARCH INC, HIDETOSHI INOKO, TAEKO
KAGIYA, TATSUO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA, MICHIO
NISHIDA
                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                     PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PI
                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 17)
Inobase 1 to 17)
Inobase 1 to 17)
Inobase 1 to 17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Artificial Sequence
WO 0192572-A/988
06-DEC-2001
01-JUN-2001 WO 2001JP004662
01-JUN-2000 JP 00P 164798
HIDETOSHI INOKO,TAEKO KAGIYA,TATSUO ICHIHARA,YOSHIYUKI
                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                   4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'organism='Artificial Sequence'
                                                                           DANGE VEERAPANANE, SHOJI HAMANAKA, IWAO NOZAWA
CO7H21/04, A61K39/00, A61K48/00
Strandedness: Single;
                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SHOGO MORIYA,MICHIO NISHIDA
C12Q1/68,C12M1/00,C12N15/09,G01N33/53
Description of Artificial Sequence:capture
                                                                                                                                                           organism='Unidentified'.
                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                          Kit and method for determining HLA type.
BD104884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                 /organism="unidentified"
                                                                                                                                                                                                             /mol_type="genomic DNA"
/db_xref="taxon:32644"
HISAMITSU PHARMACEUTICAL CO INC
                                                29-AUG-1997 JP 1998520446
                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                      BD104884.1 GI:22650458
WO 0192572-A/988.
           Unidentified
JP 2001503620-A/6
21-MAR-2001
                                                                                                                    Popology: Linear;
                                                                                                                                                                                                                                                                                                     831 CTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          929 CACCCTCCAGAGAA 942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 CACCCTCCAGAGGA 17
                                                                                                                                                                                                                                                                                                                                 Crrrrrrrrrrrrrrr 4
                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                00 Artifi
PN W0 019
PN 01-010
PN 01-JUN
PN 11DETO
MATSUMURA,
PN SHOGO P
PN SHOGO P
CC C1201/
CC Descriy
FH Key
                                                                                                                                                                                                                                                                                                                                                                                                  BD104884
            17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                         RESULT 304
                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                   BD104884
LOCUS
                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AG1P29/00,
PC AG1P35/00,AG1P43/00,C12N5/10,C12N9/00//AG1K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
JP 2002509721-A/5868
02-APR-2002
24-MAR-1999 JP 2000541291
27-MAR-1998 US 60/079678
PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 17-JUL-2003
Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.
                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases to 1)

Pavco, P.A., Roberts, B., Jarvis, T., Coeshott, C. and Mcswiggen, J.A. Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response
Patent: JP 2002509721-A 5868 02-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD202843 17-JUL-200 Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 17)
PavCo, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A. Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response Partent: JP 2002509721-A 5669 02-APR-2002; SHIBOZYME PHARMACEUTICALS INC OS Homo sapiens (human)
PU 2002509721-A/5869
PU 02-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Method and reagent for treating diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         'organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 12.4; DB 1; Length 17; Pred. No. 3.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                concerning molecule
participating in vasculogenic response
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="genomic_RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                     BD202842.1 GI:33012612
JP 2002509721-A/5868.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD202843.1 GI:33012613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JAMES A MCSWIGGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.3%;
```

```
TIMOTHY A VIKKARS
C12N15/09,C07B61/00,C07B61/00,C12Q1/68,G06F17/30,G06F17/50, PC
                                                                                                                                                              PR 13-APR-1998 US 60/081483,28-APR-1998 US 09/067638 F
LEX M COWSERT, BRENDA F BAKER, JOHN MCNEIL, SUSAN M FREIER, HENRI
                                                                                                                                                                                                                   DOUĞLAS G BROOKS, CARA OHASI, JACQUELINE R WYATT, ALEXANDER
Identification of genetic targets for modulation by oligonucleotides and generation of oligonucleotides for gene modulation Patent: JP 2002511276-A 151 16-APR-2002;
ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PD 16-APR-2002
PF 13-APR-1999 JP 2000543647
PR 13-APR-1999 US 60/08148; 28-APR-1999 US 09/067638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.

1 (bases 1 to 18)
Roberts, M.L. and Cowsert, L.M.
Antisense modulation of human Rho family gene expression
Patent: US 6410323-A 147 25-UUN-2002;
                                                                                                                                                                                                                                                                                                                                                          'organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 4.3%; Score 12.4; DB 1; Length 1
Best Local Similarity 92.9%; Pred. No. 3.9e+02;
Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1: Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

4.3%; Score 12.4; DB 1;
Best Local Similarity 92.9%; Pred. No. 3.9e+02;
Matches 13; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                         Antisense Oligonucleotide
Key Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                              1. .18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR215599 18 bp D1
Sequence 147 from patent US 6410323.
AR215599 GI:23313855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX229748 18 bp 18 bp 26quence 18 from Patent WO0162964. AX229748 GI:15591960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .18
/organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                         1. .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                872 ACACTTTCCTGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       872 ACACTITICCIGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 ACACTTTCCTGTGA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 ACACTTTCCTGTGA 16
                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                          C12N15/00
                                                                                                                                                                                                                                       BORCHERS
                                                                                                                                                                                                    M SASMOR,
PI DOUG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                      PC
                                                                                                                                                                                                                                                                                                         감물품당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 310
AX229748/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR215599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                              FEATURES
          TITLE
                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rocus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                    A61P29/00,
PC A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 16-MAY-2001
            24-MAR-1999 JP 2000541291
27-MAR-1998 US 60/079678
PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,
JAMES A MCSWIGGEN
                                                                                                  7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD250597
BD250597.1 GI:33060367
JP 2002511276-A/151.
synthetic construct
artificial sequences.
1 (bases 1 to 18)
COWSET, L.M., Baker, B.F., Mcneil, J., Freier, S.M., Sasmor, H.M.,
Brooks, D.G., Ohasi, C., Wyatt, J.R., Borchers, A.H. and Vikkars, T.A.
              PF 24-MAR-1999 JP 2000541291
PR 27-MAR-1998 US 60/079678
PI PAMBLA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHC PI JAMES A MCSWIGGEN
C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD250597 linear PAT 17-JJ ldentification of genetic targets for modulation by oligonuclectides and generation of oligonuclectides for gene modulation.
                                                                                                                                                                Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response Key
                                                                                                                                                                                                                                                                                                                                                                                                                  ·
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                           'organism='Homo sapiens (human)'
                                                                                                                                                                                                                                                                                                                                                                              4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 3.6e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match

4.3%; Score 12.4; DB 1;
Best Local Similarity 92.9%; Pred; No. 3.9e+02;
Matches 13; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (Asses 1 to 18)
Monia, B.P., Cowsert, L.M. and Roth, R.A.
Antisense modulation of AKT-3 expression
Patent: US 6187586-A 84 13.FEB-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .18
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18 bp
Sequence 84 from patent US 6187586.
AR130092.
AR130092.1 GI:14117989
                                                                                                                                                                                                                                                                                              1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                             /mol_type="genomic_RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               835 TITCTICTCTGAAG 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                       821 TIGGCIGIGICICT 834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 Tregerrrerer 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rrrcrrcrcrcas 3
                                                                                                                                                                                                                                                                                                                                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                     C12N5/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                       CG
                                                                                                                                                                                                          FEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 307
AR130092/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 308
BD250597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

ô

Gaps

0

Length 18;

ΡI

H

09/067638 PI

PAT 25-SEP-2002

ò

Gaps

.**,**

Length 18;

PAT 11-SEP-2001

linear

Key

ö

Gaps

```
PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 18-SEP-2002
                                                              C12N15/09, C12N15/09, C12M1/00, C12Q1/68, G01N33/53, G01N33/566, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic construct
synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 19)
Dean, M.F., Hahn, H., Wicking, C., Christiansen, J.,
Eaphiropoulos, P.G., Gailani, M.R., Shanley, S., Chidambaram, A.,
Smyth, I., Pressman, C., Leffell, D.J., Gerrard, B., Goldstein, R.,
Wainwright, B., Toftgard, R., Trench, G.C. and Bale, A.E.
Absal carcinoma tumor suppressor gene
Patent: JP 2002504805-A 55 12-FFB-2002;
THE GOVERNMENT OF THE UNITED STATES OF AMERICA REPRESENTED BY THE
                                                                                                            FΗ
                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                           Description of Artificial Sequence:Synthetic DNA Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.3%; Score 12.4; DB 1; Length 19; 92.9%; Pred. No. 4.1e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                      Length 18;
                                                                                                                                                            Sequence,
                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A basal cell carcinoma tumor suppressor gene.
                                                                                                                                                         /organism='Artificial
Location/Qualifiers
                                                                                                                                                                                                                                                                    4.3%; Score 12.4; DB 1;
92.9%; Pred. No. 3.9e+02;
tive 0; Mismatches 1;
                                                                                                                                                                                          1..18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:22630"
                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 247 from patent US 5851760.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19 bp
JP 2001321190-A/474
20-NOV-2001
12-MAR-2001 JP 2001068285
EIICHI SOEDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD132443.1 GI:23227388
JP 2002504805-A/55.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR066899.1 GI:5998121
                                                                                                                                                                                                                                                                                                                                   746 AGGGTCCCAGGGTC 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               923 CACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 CACCACCACACTCC 15
                                                                                                                                                                                                                                                                                                                                                                  16 AGGGTCCAAGGGTC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 92.93
Matches 13; Conservative
                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 92.9
Matches 13; Conservative
                                                                             C12N15/00,
                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD132443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD132443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                            220
                                                                                                                                          FT
FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 314
BD132443/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 313
AR066899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                        ·;
                                                                                                                                                                                                                                                                                                                                                                                  PAT 18-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cohen, D., Blumenfeld, M., Chumakov, I., Abderrahim, H. and Bihain, B. Obesity associated biallelic marker maps
Patent: WO 0206525-A 463 24-JAN-2002;
GENSET (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1..18
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/mol_type="taxon:9606"
1..18
/note="downstream amplification primer 99-54272 for SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A method of arraying genome clone
Patent: JP 2001321190-A 474 20-NOV-2001;
THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH, YUGENKAISHA
                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                             Winsey,S.U., Haldar,N., Wojnarowska,F.U. and Welsh,K.N. A genetic determinant for malignant melanoma Patent: WO 0162964-A 18 30-AUG-2001; sis Innovation Limited (GB)
                                                                                                                                                                                                         Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.3%; Score 12.4; DB 1; Length 18; nilarity 92.9%; Pred. No. 3.9e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                        Indels
                                                                                                            1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db xref="taxon:32630"
/nol_e="Primer ERCC1 exon 4 consensus"
                                                                                                                                                                                                     138; Score 12.4; DB 1; illarity 92.9%; Pred. No. 3.9e+02; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                              Sequence 463 from Patent W00206525. AX378674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD088230 18 bp A method of arraying genome clone. BD088230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121, in complement"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD088230.1 GI:22633840 JP 2001321190-A/474. synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                 AX378674.1 GI:19574527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       artificial sequences.
1 (bases 1 to 18)
   artificial sequences.
                                                                                                                                                                                                                                                                       746 AGGGTCCCAGGGTC 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGTGTCTCTTTTC 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CIGIGICITIAC 5
                                                                                                                                                                                                                                                                                                     16 AGGGTCCCCGGGTC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENOTECHS
OS Artif
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Soeda, E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      primer bind
                                                                                                                                                                                                                                        13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18
                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                     AX378674/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD088230/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                 RESULT 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                  REFERENCE
                                  AUTHORS
                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

ö

Gaps

```
Sequence 5 from Patent WO9637177.
                                                           unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
   DEFINITION
                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 318
AR039271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 317
A60699
                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
FEATURES
                                                                                                                         AUTHORS
                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
SOURCE
                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 10-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 05-MAR-1998
                                                                                                                        ΡI
                                                                                                                                                                                                           PI ALISA GÓLDSTEIN, BRANDON WAINWRIGHT, RUNE TOFTGARD, GEORGÍA PI PI ALLEN E BALE
PI ALLEN E BALE
PC C12N15/12, C07K14/47, C12N5/10, C12Q1/68, G01N33/50, A61K48/00, PC
                                                                                                                                                 IGOR VORECHOVSKY, ERIKA HOLMBERG, ANNE BIRGITTE UNDEN, SUSAN PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 17)
Heckl,K., Spevak,W., Ostermann,E., Zoephel,A., Krystek,E.,
Hawrer-Fogy,I., Wiche-Castanon,M.J., Stratowa,C. and Hauptmann,R.
Human manganese superoxide dismutase (hMn-SoD)
Patent: EP 0282899-A 17 21-SEP-1988;
BOEHRINGER INGERHEIM INTERNATIONAL GmbH
                                                                                                                                                                               KYLIE NEGUS, IAN SMYTH, CAROL PRESSMAN, DAVID J LEFFELL, BERNARD
                                                            0011 PR
PI
                                                                                                       CHRISTIANSEN,
PI PETER G ZAPHIROPOULOS, MAE R GAILANI, SUSAN SHANLEY, ABIRAMI
CHIDAMBARAM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                        PF 16-MAY-1997 JP 1997541164
PR 17-MAY-1996 US 60/017906,21-MAY-1996 AU PO 07-JUN-1996 US 60/019765
MICHAEL FREDERICK DEAN, HEIDI HAHN, CAROL WICKING, JEFFREY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 12.2; DB 1; Length 17;
Pred. No. 3.9e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.3%; Score 12.4; DB 1; Length 19; larity 92.9%; Pred. No. 4.1e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
SECRETARY DEPARTMENT OF HEALTH AND HUMAN SERVICES PN JP 2002504805-A/55 PD 12-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                            1. .19
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                Topology: Linear;
/note= 'PTCR26 primer'
Key Locati
                                                                                                                                                                                                                                                                                                  Strandedness: Single;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .,0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841 CTCTGAAGACAGCGTCC 857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCTGAAGAAATGTCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%;
ilarity 82.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             808 CTCCAACTCAGGGT 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A12194.1 GI:491297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 crccaacrcadger 3
                                                                                                                                                                                                                                                                                      A61K38/17
                                                                                                                                                                                                GERRARD,
                                                                                                                                                                                                                                       PI ALLEN B
PC C12N15/
A61K39/395,
PC A61K38/
CC Strande
CC Topolog
CC /note=
FH Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                    PI IGOR
GILLIES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A12194
EBI 765.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A12194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A58319
                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 316
A58319
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A12194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
```

```
·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 06-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Knappik,A., Pack,P., Ilag,V., Ge,L., Moroney,S. and Plueckthun,A.
PacyTEIN('POLY) PERTIDE LIBRARIES
Patent: WO 9708320-A 7 06-WAR-1997;
MORPHOSYS PROTEINOPTIMIERUNG (DE)
                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                         Rider, J.R.
APPARATUS AND METHOD FOR DETECTING A CONTAMINANT IN A FLUID PATENT: WO 9637177-A 5 28-NOV-1996;
NAT BLOOD AUTHORITY (GB)
Other publication AU 5773196 961211.
                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
0
                                                                                                                                                                                                                                                                                                                                         Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 12.2; DB 1; Length 17;
Pred. No. 3.9e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                       Score 12.2; DB 1; Length 1
Pred. No. 3.9e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             There is to 17)
Stinchcomb, D. T. and McSwiggen, J.A.
Interleukin-2 receptor gamma-chain ribozymes
Patent: US 5807743-A 119 15-SBP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 119 from patent US 5807743. AR039271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                               /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 bp
Sequence 7 from Patent W09708320.
A60699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                              920 CATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CATCCCCACCTTCCTCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGGGTGCCTTGGCCCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR039271.1 GI:5958634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.2%;
                                                                                                                                                                                                                                                                                                                                                       82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A60699.1 GI:3715347
A58319
A58319.1 GI:3713983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                           14; Conservative
```

```
1 (bases 1 to 17)
Grimm, S., Stinchcomb, D.T., McSwiggen, J., Sullivan, S. and
Draper, K.G.
Ribozyme treatment of diseases or conditions related to levels of
intercellular adhesion molecule-1 (ICAM-1)
Patent: US 6132967-A 1680 17-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C12P21/02, C12P21/02//A61K31/711, (C12N5/10,C12R1:91), (C12P21/02, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CI2RI:91),
PC (C12P21/02,C12RI:91),(C12P21/02,C12RI:91),C12NI5/00,C12NS/00,
PC AGIN3/00,
PC (C12NS/00,C12RI:91)
CC Regulation of repressor genes using nucleic acid molecules FH
Key
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OS Eukaryote
PN JP 2002541795-A/3032
PD 10-DEC-20002
PF 11-APR-2000 TP 2000611654
PR 12-APR-1999 US 60/129390
PI LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN iclinis/09,A61K38/00,A61K48/00,A61F43/00,A61K38/00,A61K48/00,A61F43/00,AC12N5/10, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD255239 17 bp DNA linear PAT 17-Regulation of repressor genes using nucleic acid molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unidentified unclassified.

I (bases 1 to 17)

Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.

Regulation of repressor genes using nucleic acid molecules Patent: JP 2002541795-A 3032 10-DEC-2002;
                                                                                                                                                                                                                                                                                                                                                Query Match
4.2%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'organism='Eukaryote'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.2%; Score 12.2; DB 1;
32.4%; Pred. No. 3.9e+02;
ive 0; Mismatches 3;
             Sequence 1680 from patent US 6132967.
AR115234
                                                                                                                                                                                                                                                                                             /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                AR115234.1 GI:14095556
                                                                                                                                                                                                                                                                                                                                                                                                                         897 CICAGCITCIGCGAICA 913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD255239.1 GI:33065009
JP 2002541795-A/3032.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 crcescrrcreccacca 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  932 CCTCCAGAGAATTTTAC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 4.2%;
Best Local Similarity 82.4%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 CCTCCAGAGATGTGTAC 1
                                                                                                                          Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C12P21/02,
PC
                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD255239
                                                                                                      Unknown.
                       ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 322
BD255239/c
LOCUS
           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                           REFERENCE
                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
                                                                                                                      ô
                                                                                                                                                                                                                                                                                     PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 16-MAY-2001
                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 17)
Grimm, S., Stinchcomb, D.T., McSwiggen, J., Sullivan, S. and
                                                                                                                  ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                       1 (baces 1 to 17)
Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T. C-myb ribozymes having 2'-5'-linked adenylate residues
Patent: US 5817796-A 1571 06-0CT-1998;
                                                                  Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.98+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Intercellular adhesion molecule-1 (ICAM-1) ribozymes
Patent: US 5837542-A 1680 17-NOV-1998;
Location/Qualifiers
1 . 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.96+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                            AR046778 17 bp DN
Seguence 1571 from patent US 5817796.
AR046778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1680 from patent US 5837542.
AR057476
                                  /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 bp
               /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
                                                                                                                                             835 TITCTTCTCTGAAGACA 851
                                                                                                                                                                                1 rcrarrcrcrdaddad 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      797 CAAGAGCTCTCCTAA 813
                                                                                                                                                                                                                                                                                                                                  AR046778.1 GI:5968243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 cgaaagcicicicicaaa 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     897 CTCAGCTTCTGCGATCA 913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR057476.1 GI:5983053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          crcgcrrcrgccacca 17
                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Draper, K.G.
                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                          Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR115234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Н
source
                                                                                                                                                                                                                                   RESULT 319
AR046778
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR057476
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
```

JOURNAL FEATURES

TITLE

KEYWORDS SOURCE

ò

REFERENCE AUTHORS

0

Gaps

0;

PAT 17-JUL-2003

ЪС

ORGANISM

SOURCE

REFERENCE AUTHORS TITLE JOURNAL FEATURES

ACCESSION VERSION KEYWORDS

RESULT 320

à g ö

Gaps

. 0

RESULT 321 AR115234 LOCUS

```
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR186585/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                153830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            L. (bases 1 to 17)

RS Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.

Regulation of repressor genes using nucleic acid molecules

Regulation of repressor genes using nucleic acid molecules

Regulation of repressor genes using nucleic acid molecules

REGULATION OF REPRESSOR OF A 171 10-DEC-2002;

RIBOZYME PHARMACEUTICALS INC

OS BUKARYOTE

PR 10-DEC-2002

PF 11-APR-2000 JP 2000611654

PF 11-APR-2000 JP 2000611654

PF 12-ARP-1999 US 60/129390

PR 12-ARP-1999 US 60/12930

FI LAWRENCE BLATT,MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC C12P21/02,

C12P21/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 17-JUL-2003
           BD256490 17-JUL-2003
Regulation of repressor genes using nucleic acid molecules.
BD256490
                                                                                                                                                                                                                                                                                                                                                                                                 OS EUKaryote

PN JP 2002541795-A/4283

PD 10-DEC-2002

PF 11-APR-2000 JP 2000611654

PR 12-APR-1999 US 60/129390

PI LAWRENCE BLATT, MICHAEL, ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC C12N15/09, A61K38/00, A61P43/00, A61P43/00, C12P21/02, C12P21/02, C12P21/02, C12P21/02, C12P21/02, C12P21/02, C12P21/02, C12P21/02, PC C12P21/02, C12P21/02, C12P21/02, PC C12P21/02, C12P21/02, C12P21/02, C12P21/02, C12P21/02, PC C12P21/02, C12P21/02, C12P21/02, PC C12P21/02, C12P21/02, C12P21/02, PC C12P21/02, C12P21/02, PC C12P21/02, C12P21/02, PC C12P21/02, C12P21/02, PC C12P21/02, C12P2/02, C12P21/02, C12P21/02, C12P2/02, C12P2/02, C12P2/02, C12P2/02, C12P2/02, C12P2/02, C12P2/02, C12P2/02, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Regulation of repressor genes using nucleic acid molecules FH Location/Qualifiers source 1.17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
A61K37/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Regulation of repressor genes using nucleic acid molecules. BD256938 BD256938. GI:33066708 GI:20254175-A/4731. unidentified unidentified
                                                                                                                                                                                                                                    unclassified.

1 (bases 1 to 17)

Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
Regulation of repressor genes using nucleic acid molecules Patent: JP 2002541795-A 4283 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.2%; Score 12.2; DB 1; Length 1
82.4%; Pred. No. 3.9e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism='Eukaryote'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .17
/organism="unidentified"
/mol_type="genomic DNA"
/db xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (C12N5/00, C12R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 865 AGTIGGAACACTITCCI 881
                                                                                                                           BD256490.1 GI:33066260
JP 2002541795-A/4283.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 AGTIGGAAGATITITCI 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ilarity 82.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                   unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .112P21/v...
C12R1:91),
PC (C12P'
PC AGIK
PC (C1'
CC Re'
Key
FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 324
BD256938/c
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                            DEFINITION
RESULT 323
BD256490/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
SOURCE
                                                                                                                                                                                                                   ORGANISM
                                                                                                                                 VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
```

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                           Regulation of repressor genes using nucleic acid molecules FH Location/Qualifiers
      Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.

I (bases 1 to 17)

Pavco, P., McSwiggen, J., Stinchcomb, D. and Escobedo, J.

Pavco, P., McSwiggen, for the treatment of diseases or conditions
method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6346398-A 2073 12-FEB-2002;
Location/Qualifiers
                                                1:31),
(C12P21/02,C12R1:91), (C12P21/02,C12R1:91),C12N15/00,C12N5/00,
PC
C12P21/02,C12P21/02//A61K31/711,(C12NS/10,C12R1:91),(C12P21/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown...
Unclassified.
Unclassified.
1 (bases 1 to 17)
Stinchcomb.D.T., Draper.K., McSwiggen,J. and Jarvis,T.
C-myb targeted ribozymes
C-myb targeted ribozymes
Patent: US 546642-A 1571 08-JUL-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                          Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                        Query Match
4.2%; Score 12.2; DB 1; Length 1
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                          /organism='Eukaryote'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2073 from patent US 6346398. ARI86585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 bp DNA
Sequence 1571 from patent US 5646042.
153830.1 GI:2475033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                         /organism="unidentified"
/mol type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:20232550
                                                                            A61K37/02,
(C12N5/00,C12R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        797 CAAGAGCTCTCCTCCAA 813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | | ||||||||||| ||
1 CGAAAGCTCTCCTCGAA 17
                                                                                                                                                                                                                                                                                                                                                                                                               865 AGTIGGAACACTITCCT 881
                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 AGTTGGAAGATTTTTCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR186585.1
                                                                                                                                                                   source
                                       C12R1:91)
PC (C12P)
PC AGIN3
PC (C12N)
CC Reguli
Key SOUTC
```

```
1. 17
                                                  Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                               Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.
                   .
Unknown.
                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Si
Matches 14;
        KEYWORDS
SOURCE
ORGANISM
                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                         AUTHORS
TITLE
                                                                                                   JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                        RESULT 330
                                                                                                                                                                                                                                                                                                                      AR317132/c
                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR323216/c
                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                ö
                                                                                                                                                     PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 12-JUN-2003
                                                                                                                                                                                                                                                       1 (bases 1 to 17)
Pavco.P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Pathod and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 5466 12-FEB-2002;
Location/Qualifiers
                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.2%; Score 12.2; DB 1; Length 17; llarity 82.4%; Pred. No. 3.9e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 17)
Beigelman,L., Burgin,A., Beaudry,A., Karpeisky,A., Matulic-Adamic,J., Sweedler,D. and Zinnen,S.
Synthetic ribonucleic acids with RNAse activity Patent: US 6528640-A 819 04 MAR-2003,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                           4.2%; Score 12.2; DB 1;
82.4%; Pred. No. 3.9e+02;
tive 0; Mismatches 3;
                                                                                                                                                  AR189998
Sequence 5486 from patent US 6346398.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 819 from patent US 6528640.
                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 149 from patent US 6555357, AR309001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
/mol_type="unassigned RNA"
                                                  865 AGTIGGAACACTITCCI 881
                                                                                                                                                                        AR189998
AR189998.1 GI:20235963
                                                                                                                                                                                                                                                                                                                                                                                                                                              869 GGAACACTTTCCTGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR286447.1 GI:29724043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR309001.1 GI:31700757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GAAACCCTTTCCTGGGA 17
                                                                             AGCTGAAATACTTTCCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCCCCAGGICICCACT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          757 GTCCCTAGGCCTCCACT
                         14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 82.4 Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .17
                                                                                                                                                                                                                                         Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unclassified.
           Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                               AR189998
                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR309001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
Query Match
                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                            LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR286447
LOCUS
DEFINITION
                                                                                                                    RESULT 327
AR189998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR309001/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 329
                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 618 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                       12%; Score 12.2; DB 1; Length 17; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 17)
Kaiser,M.W., Lyamichev,V.I. and Lyamicheva,N.
FEN-1 endonucleases, mixtures and cleavage methods
Patent: US 6562611-A 149 13-MAY-2003;
Location/Qualifiers
1 (bases 1 to 17)
Kaiser, M.W., Lyamichev, V.I. and Lyamicheva, N.
FEN-1 endomuclease, mixtures and cleavage methods
Patent: US 6555357-A 149 29-APR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.2%; Score 12.2; DB 1; I
82.4%; Pred. No. 3.9e+02;
Live 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 149 from patent US 6562611.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 pp n. Sequence 618 from patent US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                   /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
/wol_type="genomic DNA"
                                                                                      Location/Qualifiers
                                                                                                                               /organism="unknown"
                                                                                                                                                                                                                                                                          892 TACTICICAGCITCIGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR317132.1 GI:33696368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            892 TACTICICAGCTICIGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR323216
AR323216.1 GI:33709024
                                                                                                                                                                                                                                                                                                                 17 TACTTAGCAGCTTCTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 TACTTAGCAGCTTCTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 82.4
nes 14; Conservative
```

δ g

```
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                         /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 873 CACTITICTICAGATGCA 889
                                                                                                                                                                                                                                                                                                                                  AR329270.1 GI:33715078
                                                                                                                                                                                         861 CTCCAGTTGGAACACTT 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACTTACCTGAGGAGCA 17
                                                                                                                                                                                                                17 CTCCAGATGGAACCATT 1
                                                                                                                                                                 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
Unclassified.
                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                         Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
FEATURES
                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 336
                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                RESULT 335
AR329270
                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
              AUTHORS
                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR363926
REFERENCE
                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                     FEATURES
                             TITLE
                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                        a
                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                               o;
                                                                                                  PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.

[ (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 5467 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                Dascs 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 2377 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                 .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; rative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                      4.2%; Score 12.2; DB 1;
32.4%; Pred. No. 3.9e+02;
ive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 bp RNA
US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5467 from patent US 6566127.
                                                                                                     17 bp RNA
US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                               /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 5477 from patent
AR328075
                                                                                                     AR324975
Sequence 2377 from patent
AR324975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     807 CCTCCAACTCAGGGTTG 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR328075.1 GI:33713883
                                                                                                                                                                                                                                                                                                                                                                                                              869 GGAACACTITCCIGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCAAACTCAGGTTTG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR328065.1 GI:33713873
        881
                                                                                                                                            AR324975.1 GI:33710783
                                                                                                                                                                                                                                                                                                                                                                                                                                       1 daaacccrrrccreeda 17
                                 17 AGCTGAATACTTTCCT 1
                                                                                                                                                                                                                                                                                                                                                                      82.48;
        865 AGTIGGAACACTITCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                    14; Conservative
                                                                                                                                                                                         Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR328075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown
                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 334
AR328075/c
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 333
AR328065
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                     DEFINITION
                                                                                                                                                                                        ORGANISM
                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                              RESULT 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                           AR324975
                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Пр
                                                                                                                                                                                                                                                                                                                                                                                                                 à
```

d

```
·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 03-SEP-2003
                                                                                                                                                                                                                                                                                                                                         o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (Dases 1 to 17)
Heckl, K., Spevak, W., Ostermann, E., Zophel, A., Krystek, B.,
Heckl, K., Spevak, W., Wiche-Castanon, M.J., Stratowa, C. and Hauptmann, R.
Human manganese supercxide dismutase (hMn-SOD)
Patent: US 5240847-A 21 31-AUG-1993;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (Dases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Pavco, P., McSwiggent, for the treatment of diseases or conditions
method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 656127-A 6672 20-MAY-2003;
Unclassified.

(Lobase 1 to 17)

Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.

Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.

Method, and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 8477 20-MAY-2003;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 17;
                                                                                                                                                                                                                                                                                    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 4.2%; Score 12.2; DB 1; Length 1 Best Local Similarity 82.4%; Pred. No. 3.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 1
82.4%; Pred. No. 3.9e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1;
ilarity 82.4%; Pred. No. 3.9e+02;
Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR329270 17 bp RNA Sequence 6672 from patent US 6566127. AR329270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR363926 17 bp 17 bp 8equence 21 from patent US 5240847. AR363926 AR363926.1 GI:34426033
                                                                                                                                                                                                                                   /mol_type="unassigned RNA"
```

```
AR434003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 340
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR434004
                                                                                                                                                                                                                                                                                                                                                                                                                                           AR434003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                         FEATURES
                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 18-DEC-2003
                                                                                                                                                               PAT 12-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                     Unclassified.

1 (bases 1 to 17)

Rappin/Ap. Pack, P., Ge, L., Moroney, S. and Pluckthun, A. Protein/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/Appin/A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 17)
Beigelman, L., Burgin, A.B., Beaudry, A., Karpeisky, A., Matulic-Adamic, J., Sweedler, D. and Zinnen, S.
Oligoribonucleotides with enzymatic activity
Patent: US 6617438-A 818 09-SEP-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.2%; Score 12.2; DB 1; Length 17;
82.4%; Pred. No. 3.9e+02;
.ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.2%; Score 12.2; DB 1;
82.4%; Pred. No. 3.9e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR398437 17 bp RN
Seguence 818 from patent US 6617438.
AR398437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
/wol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 23 from patent US 6632641.
                                                                                                                                                        Sequence 7 from patent US 6300064.
AR369047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     757 GICCCIAGGCCICCACT 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR408828
AR408828.1 GI:40159229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR398437.1 GI:40136249
                                                                                                                                                                                                                                   AR369047.1 GI:34605003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCCCCAGGICICCACT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 caederecerrecece 17
                                                CTCTGAAGAAATGTCC 17
  CTCTGAAGACAGCGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR408828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                         Unknown
  841
                                                Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 339
AR408828/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                               LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 338
                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                   RESULT 337
AR369047
                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR398437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Пp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
    ò
```

```
PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 18-DEC-2003
Brennan,T.M., Chatelain,F. and Berninger,M. Method and apparatus for performing large numbers of reactions using array assembly with releasable primers Patent: US 632641_A 23 14-OCT-2003; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                  .0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                 Query Match
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclassified.

1 (bases 1 to 17)
Gu,Y. and Shannon,M.E.
Isoforms of human pregnancy-associated protein-E
Patent: US 6656700-A 426 02-DEC-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 17)
Gu,Y. and Shannon,M.E.
Isoforms of human pregnancy-associated protein-E
Patent: US 6656700-A 427 02-DEC-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match

4.2%; Score 12.2; DB 1;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR434004 17 bp D1
Sequence 427 from patent US 6656700.
                                                                                                                                                                                                                                                                                                                                                                                                                                               AR434003 17 bp I Sequence 426 from patent US 6656700.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .17
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                     /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Socation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        825 CIGIGICICITITICITC 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR434004
AR434004.1 GI:40196847
                                                                                                                                                                                                                                                                                              817 AGGGTTGGCTGTGTCTC 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR434003.1 GI:40196846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 creregererrerer 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 rerecerciacian 17
                                                                                                                                                                                                                                                                                                                                       17 AGGGTGGGTGTGTCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  826 rgrercrrrrcrrcr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
```

```
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                            AX215695
                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                              RESULT 345
AX215695/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 346
AX217022/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
               REFERENCE
                                 AUTHORS
                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                           Voss,J. and Timm,J.
Methods and compositions for the screening of cell cycle modulators
Patent: WO 0120034-A 11 22-MAR-2001;
BASF AKTIENGESELLSCHAFT (DE)
                                                                                                                                                                                                                                                                                                                                                                              ·.
                                             PAT 02-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 15-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 07-SEP-2001
                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1
Brennan,T.M., Chatelain,F. and Berninger,M.
Method and apparatus for performing large numbers of reactions
using array assembly
Patent: WO 0127327-A 23 19-APR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·
0
                                                                                                                                                                                                                                                                                                                                            Query Match
4.2%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; tive 0; Mismatches 3; Indels
                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RNA
                                                                                                                                                                                                                                                                                  /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db xref="taxon:9606"
                                       Sequence 11 from Patent W00120034.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp
Sequence 12 from Patent W00159103.
AX214570
AX214570.1 GI:15524613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX133964 17 bp
Sequence 23 from Patent W00127327.
AX133964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Protogene Laboratories, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                   Mus musculus (house mouse)
Mus musculus
                                                                                      AX099951.1 GI:13538961
                                                                                                                                                                                                                                                                                                                                                                                                          901 GCTTCTGCGATCAGATT 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX133964.1 GI:14139905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             817 AGGGTTGGCTGTGTCTC 833
                                                                                                                                                                                                                                                                                                                                                                                                                          17 GCTTCTGCTATCAAAGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 AGGGTGGTGGTGTCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
ORGANISM
           RESULT 342
AX099951/c
                                                        DEFINITION
                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX133964/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 344
AX214570
                                                                                                                                                                                                           TITLE
JOURNAL
                                                                     ACCESSION
                                                                                                                                                                                              AUTHORS
                                                                                      VERSION
KEYWORDS
                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                    SOURCE
                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 07-SEP-2001
Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 1137 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Blatt,L., Mcswiggen,J. and Chowrira,B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 2464 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);
                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                    nogo gene expression
Patent: WO 0159103-A 12 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US)
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                Ouery Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 3.9e+02; Ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                       /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/noTe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db xref="taxon:32630"
/noTe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17 bp RN
Seguence 2464 from Patent W00159103.
AX217022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17 bp R
WO0159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1137 from Patent AX215695
AX215695.1 GI:15525738
                                                                                                                                                                                                                                                                                                                                                                                                                                 918 ATCATCACCACCACCT 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       972 CTAAATCTGGTGTATGG 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX217022.1 GI:15527083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AGCATCATCTCCACCCT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 82.4%;
Matches 14; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 craaarcregaercaee 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.
```

ö

Gaps

.. 0

Indels

```
Pred. No. 3.9e+02;
0; Mismatches 3;
                                                      818
           Best Local Similarity 82.4%;
Matches 14; Conservative
                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 4.2%;
Best Local Similarity 82.4%;
Matches 14; Conservative
                                                   802 GCTCTCCTCCAACTCAG
                                                                               17 GCTCTCCTCCACTACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                           AX267014
                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 350
AX474888
                                                                                                                      RESULT 349
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                       KEYWORDS
SOURCE
                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                      AX267014
                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                0;
                                                                                                                                                                                                                                                                         PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk
                                                                                                                                                                                                                                                                                                                                                                                           Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                     nogo gene expression
Patent: WO 0159103-A 2617 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US)
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1) enzyme
Patent: WO 0157206-A 1059 09-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Fattaey, Ali R. (US)
Location/Qualifiers
                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.2%; Score 12.2; DB 1; Length 17;
                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
Location/Qualifiers (US) (US)
                                                                                                                Score 12.2; DB 1;
Pred. No. 3.9e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/note="Nucleic Acid"
                                            1. .17
/organism="Bynthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                        RNA
                                                                                                                                                                                                                                                                  Sequence 2617 from Patent W00159103. AX217175 GI:15527236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1059 from Patent W00157206. AX227687
                                                                                                                                                                      889 ACTIACTICICAGCIIC 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 889 ACTIACTICICAGCIIC 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX227687.1 GI:15556828
                                                                                                                  4.2%;
                                                                                                                                                                                       17 ACTAACTTCTCTTCTTC 1
                                                                                                                                                                                                                                                                                                                                                   synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 AGTTTTTTCTCAGCTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                         synthetic construct
                                                                                                                                          14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 82.4*
Matches 14; Conservative
                                                                                                             Query Match
Best Local Similarity
     McSwiggen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                 source
                                                                                                                                                                                                                                        RESULT 347
AX217175/c
                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 348
AX227687/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                      ð
                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
```

```
·,
      PAT 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·;
                                                                                                                                                                                Seidman, M.M. and Majumdar, A.

Establishment of cellular manipulations which enhance
oligo-mediated gene targething
Patent: WO 0173001-A 3 04-0CT-2001;
THE SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                      4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 3.9e+02; Ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    th 4.2%; Score 12.2; DB 1; Length 17; Similarity 82.4%; Pred. No. 3.9e+02; 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhang, J.

Human kidney tumor overexpressed membrane protein 1
Patent: WO 0224750-A 109 28-MAR-2002;
      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                             1..17
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="texon:32630"
/note="Synthetic"
      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX474888 17 bp 1 Sequence 109 from Patent W00224750. AX474888 AX474888.1 GI:22214173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned DNA"
/db_xref="taxon:9606"
AX267014 17 bp
Sequence 3 from Patent W00173001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                            AX267014.1 GI:16515799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   826 TGTGTCTTTTCTTCT 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    751 CCCAGGGTCCCTAGGCC 767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 rricrirrirriri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 cccascerccerdscc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 351
AX475307/c
```

```
Query Match
Best Local Similarity
                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 355
AX527146/c
                                                           source
                                                                                                                                                                                                                                                        RESULT 354
AX500262
                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                               g
                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 27-SEP-2002
  PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                    Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhang,J.

Human kidney tumor overexpressed membrane protein 1

Patent: WO 0224750-A 560 28-MAR-2002;

Aeomica, Inc. (US)

Location/Qualifiers
                                                                                                                                  l
Zhang, J.
Human kidney tumor overexpressed membrane protein 1
Patent: WO 0224750-A 528 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 455 from Patent EP1229046.
                                                                                                                                                                                                                                                                                                                                                                                                                                         17 bp 1
Sequence 560 from Patent W00224750.
AX475339
XX475339.1 GI:22214624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
  AX475307 17 bp
Sequence 528 from Patent WO0224750.
AX475307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         775 CTGAGGGCAGCCCTCT 791
                                                                                                                                                                                                                                                                                                                                              805 CTCCTCCAACTCAGGGT 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX499148.1 GI:23381441
                                          AX475307.1 GI:22214592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 CTGAGAGGAGCTCCTCT 1
                                                                                                                                                                                                                                                                                                                                                                          17 crecrecaaarcaeer 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 82.4'
Matches 14; Conservative
                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhan, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 353
AX499148/c
                                                                                                                                                                                                                                                                                                                                                                                                                                 AX475339/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 352
                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
```

```
PAT 21-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 27-SEP-2002
                                                                                                                                                                                                                                         ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                              Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human testis expressed patched like protein Patent: EP 1229046-A 1569 07-AUG-2002; Acomica, Inc. (US) Location/Qualifiers
Human testis expressed patched like protein Patent: EP 1229046-A 455 07-AUG-2002; Acomica, Inc. (US)
                                                                                                                                                                                            4.2%; Score 12.2; DB 1;
82.4%; Pred. No. 3.9e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gu,Y. and Corrigan,A.
Human nedd-1
Patent: WO 0226818-A 176 04-APR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                 AX500262 17 bp DN
Sequence 1569 from Patent EP1229046.
AX500262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX527146 17 bp D
Sequence 176 from Patent WO0226818.
AX527146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                           1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  916 TIATCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX527146.1 GI:25171761
                                                                                                                                                                                                                                                                                     777 GAGGCAGCCCCTCTGG 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX500262.1 GI:23382555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rracaarcaccarc 17
                                                                                                                                                                                                                                                                                                                           17 GACAGCAGCCCTCTAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                             14; Conservative
                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zhan, J.
```

```
AX531208
AX531208.1 GI:25254209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                 Shannon, M.
                                               SOURCE
ORGANISM
                                                                                                                                                                                    source
        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                        RESULT 359
AX531518/c
                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
ORGANISM
                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 360
AX531603
                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
      ö
                                                                                                                          PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear PAT 22-NOV-2002
                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
     ó
                                                                                                                                                                                                                                                                                                                                                                                                                         ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·
0
                                                                                                                                                                                                                                                                                                                                                                                      Query Match
4.2%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; ative 0; Mismatches 3; Indels
                                                                                                                        linear
    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human posh-like protein 1
Patent: EP 1239051-A 714 11-SEP-2002;
Aeomica, Inc. (US)
                                                                                                                                                                                                                                                               Human posh-like protein 1
Patent: EP 1239051-A 45 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
 Mismatches
                                                                                                                                                                                                                                                                                                                        1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX531205 17 bp I
Sequence 714 from Patent BP1239051.
AX531205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                  Sequence 45 from Patent EP1239051. AX530536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX531208
Sequence 717 from Patent EP1239051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
  ;
0
                         954 AAGAGCCAAATTGACTC 970
                                                                                                                                                           AX530536.1 GI:25252449
                                                                                                                                                                                                                                                                                                                                                                                                                                            783 AGCCCCTCTGGTGCCAA 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX531205.1 GI:25254203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               836 TICITCTCTGAAGACAG 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 AGCGCCGCTGCTGCCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rccrrcrccgagacag 17
                                              17 AATAGCCAAAGTGGCTC
                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 82.47
Matches 14; Conservative
                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                       Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aeomica,
                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX531208
LOCUS
DEFINITION
                                                                                                     AX530536/c
LOCUS
                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                         RESULT 356
Matches
                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 357
                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX531205
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                           ά
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                 Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                    Query Match
4.2%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jannon, M.
Human posh-like protein 1
Patent: BP 1239051-A 1027 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                 Human posh-like protein 1
Patent: EP 1239051-A 717 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shannon,M.
Human posh-like protein 1
Patent: EP 1239051-A 1112 11-SEP-2002,
                                                                                                                                                                                                      1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX531518
Sequence 1027 from Patent EP1239051.
AX531518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX531603
Sequence 1112 from Patent EP1239051.
AX531603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                        839 TICTCTGAAGACAGCGT 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX531518.1 GI:25254808
                                                                                                                                                                                                                                                                                                                                                                                                                 831 CTCTTTCTTCTGAA 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX531603.1 GI:25254996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 CTTTGTTCTTCTAAA 1
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
```

```
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                             AX532416/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 364
AX555685/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX634501
LOCUS
                                                                  RESULT 363
                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                      ACCESSION
                                                                                                                                                                                                                      REFERENCE
                                                                                                                                  VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                        g
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 22-NOV-2002
                                                                                                                                                                                                                                                 PAT 22-NOV-2002
                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryoča; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match

4.2%; Score 12.2; DB 1; Length 17;

Best Local Similarity 82.4%; Pred. No. 3.9e+02;

Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; ative 0; Mismatches 3; Indels
                                                                                             Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human posh-like protein 1
Patent: EP 1239051-A 1888 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                       Human posh-like protein 1
Patent: EP 1239051-A 1887 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1888 from Patent EP1239051. AX532379.1 GI:25256535
 Location/Qualifiers
1. 17
/organism="Homo sapiens"
/mol type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                              Sequence 1887 from Patent EP1239051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     752 CCAGGGTCCCTAGGCCT 768
                                                                                                                                                       740 CTTGGTAGGGTCCCAGG 756
                                                                                                                                                                                                                                                                                          AX532378.1 GI:25256533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 CCATGGTCCTTCGGCCT 17
                                                                                                                                                                        1 CTCCGTAGGGGCCCAGG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 82.43
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                             Shannon, M.
        Aeomica,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                             RESULT 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX532379
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                       AX532378
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                   Db
                                                                                                                                                           ð
```

```
PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 27-NOV-2002
                                                                                                                           PAT 22-NOV-2002
                                                                                                                                                                                                                                                     Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
4.2%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; tive 0; Mismatches 3; Indels
                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lyamichev, V.I., Kaiser, M.W. and Lyamicheva, N. Fen endonucleases
Patent: WO 202070755-A 281 12-SEP-2002;
Third Wave Technologies, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                 landon, M.
Human posh-like protein 1
Patent: BP 1239051-A 1925 11-SEP-2002;
Aeomica, Inc. (da.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1640 from Patent BP1260586. AX634501. GI:28470115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX555685 17 bp DN Sequence 281 from Patent WO02070755. AX555685 AX555685.1 GI:25899175
                                                                                                                             AX532416
Sequence 1925 from Patent EP1239051.
AX532416
                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       892 TACTTCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                777 GAGGGCAGCCCCTCTGG 793
753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                     AX532416.1 GI:25256607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 TACTTAGCAGCTTCTTC 1
                   17 GAGGGATCCCCTGTGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 82.4
Matches 14; Conservative
```

ö

ö

```
Best_Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                      medicines
                                                                                                                                                                                                                                                                                                                                                                                            AX687513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX687771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mdz12
                                                                                                                                                                                                          Query Match
                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                        RESULT 368
AX687513
                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 369
AX687771/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                           à
                                                                                                                                                    Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                         ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcwiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.B. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                     Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 3.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1109 from Patent W003004526. AX672664
                                                                                                                                                                                  Patent: BP 1260586-A 1640 27-NOV-2002; RIBOZYME PHARMACEUTICALS, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent: WO 03004526-A 471 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 471 from Patent W003004526. AX672026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                      /mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                      /organism="unidentified"
                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                       897 CTCAGCTTCTGCGATCA 913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX672026.1 GI:29330374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               896 TCTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX672664.1 GI:29331012
                                                                                                                                                                                                                                                                                                                                                                                                                      1 cresecriciscoacca 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 rereserrereare 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 82.4
Matches 14; Conservative
unidentified
unidentified
                                  unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               medicines
                                                                                                                                      Woolf, T.
                                                                                                                                                                       genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 366
AX672026/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                  REFERENCE
                                                                    AUTHORS
                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX672664
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
```

```
PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 31-MAR-2003
Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shannon,M., Gu,Y. and Nguyen,C.T.
Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·
0
                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                  4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                            Materia: WO 03004526-A 1109 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: EP 1281758-A 245 05-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent: EP 1281758-A 503 05-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 245 from Patent EP1281758. AX687513
                                                                                                                                                                            1. 17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX687771 17 bp
Sequence 503 from Patent EP1281758.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                    884 GAIGCACTIACTICICA 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX687513.1 GI:29410207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   934 TCCAGAGAATTTTACGC 950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX687771.1 GI:29410467
                                                                                                                                                                                                                                                                                                                                                                                                                                1 GATCCACTTAGTTCTTA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 rccadadacriricedc 17
                                                                                                                                                                                                                                                                                                                         82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
```

Page

```
756 GGICCCIAGGCCICCAC 772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                896 TCTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX736384
AX736384.1 GI:30515661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               904 TCTGCGATCAGATTATC 920
                                                                                                                                                                AX728257.1 GI:30507600
                             1 GATCCATGGGCCTCCAC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 TCTCTGCTTCTCTGATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 TCTGAAATCAGATGATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                RESULT 372
AX728257/c
LOCUS
                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 373
AX736384/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 374
AX738195/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
   ð
                                                                                    ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·,
                                                                                                                                                                                                                                 PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                              Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                              Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                    ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.2%; Score 12.2; DB 1; Length 17; 12.4%; Pred. No. 3.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; ative 0; Mismatches 3; Indels
                                                4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02;
                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                  3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent: WO 03025176-A 1900 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent: WO 03025176-A 3815 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                               AX724213 17 bp DNA
Sequence 1900 from Patent WO03025176.
AX724213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX726128
Sequence 3815 from Patent WO03025176.
AX726128
AX726128.1 GI:30505471
                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /wol_type="unassigned DNA"
/db xref="taxon:10090"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                               Mus musculus (house mouse)
                                                                                                                 760 CCTAGGCCTCCACTTCT 776
                                                                                                                                                                                                                                                                              AX724213.1 GI:30503556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                896 TCTCAGCTTCTGCGATC 912
                                                                                                                                           17 CCTTGGCCTCCAGTGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 TCACAGCTTCTCAGATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 82.4%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 82.43
Matches 14; Conservative
                                                                 Best_Local Similarity 82.43
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                  medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               medicines
                                                   Query Match
                                                                                                                                                                                                              AX724213/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                RESULT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 371
                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX726128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
```

```
PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 08-MAY-2003
                                                                                                                                               Mus musculus (house mouse)
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments 27-AMAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                      Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 3.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
4.2%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                            Parent: WO 03025176-A 5944 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
Sequence 5944 from Patent W003025176. AX728257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX736384 17 bp DNA Sequence 1974 from Patent WO03025177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
```

```
Homo sapiens
                                                                                                                                                                        Query Match
                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
         REFERENCE
AUTHORS
                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                            RESULT 377
AX757321
                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 378
AX757586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                  PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
      PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 23-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 23-JUN-2003
                                                                                                   Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                            Telerman, A., Amson, P. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A 3785 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                     Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
4.2%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
    linear
                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                 Score 12.2; DB 1;
Pred. No. 3.9e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
AX738195 17 bp DN7
Sequence 3785 from Patent W003025177.
AX738195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human angiomotin-like protein 1
Patent: WO 03037931-A 244 0B-MAY-2003,
Amersham Biosciences SV Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 244 from Patent WO03037931.
AX753897.1 GI:32166594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 bp DI Sequence 245 from Patent W003037931. AX753898
                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                           Location/Qualifiers
                                           AX738195.1 GI:30517483
                                                                                                                                                                                                                                                                                                                                                                                         896 TCTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          775 CTGAGGGCAGCCCCTCT 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX753898.1 GI:32166595
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGAGGGGAGGCCCACT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Shannon, M. and Phan, T.
                                                                                                                                                                                                                                                                                                                                                                                                                     17 réréadecrerandare 1
                                                                                                                                                                                                                                                                                                                                             14; Conservative
                                                                                                                                                                                                                                                                                                                                  4.28;
                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
              DEFINITION
                                                                                     ORGANISM
                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                          Matches
                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 376
                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX753897
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX753898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.2%; Score 12.2; DB 1; Length 13.4%; Pred. No. 3.9e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                Score 12.2; DB 1;
Pred. No. 3.9e+02;
0; Mismatches 3;
Shannon, M. and Phan, T.
Shannon, M. and Phan, T.
Human amgiomotin-like protein 1
Patent: WO 03037931-A 245 08-MAY-2003;
Amersham Biosciences SV Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         April 18 15-MAY-2003; Medicines Petent: WO 03040369-A 642 15-MAY-2003; Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 642 from Patent W003040369.
AX757321
AX757321.1 GI:32251937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent: WO 03040369-A 907 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
1...17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 907 from Patent WO03040369. AX757586
                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                    792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       909 GATCAGATTATCATCAC 925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX757586.1 GI:32252202
                                                                                                                                                                                                                                                                                                                                                         1 readdesagecccacre 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17
                                                                                                                                                                                                                                  4.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                              776 TGAGGGCAGCCCCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GATCAGTTTTTCACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                 Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 82.43
Matches 14; Conservative
```

```
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD095925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Guo, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 383
BD095925/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX783340/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                      ORGANISM
                                                                                                       AX762343/c
LOCUS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                          RESULT 381
                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                       ACCESSION
                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                         g
              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                            0
                                                                                                                                                                                                                                      PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                      Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Verrebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines modicines WO 03040369-A 3038 15-MAY-2003; Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                              Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 3.96+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
4.2%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                            ch 4.2%; Score 12.2; DB 1; Length 17; 1 Similarity 82.4%; Pred. No. 3.9e+02; 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3038 from Patent W003040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 03040369-A 2654 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                 Sequence 2654 from Patent WO03040369. AX759333 GI:32253949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     870 GAACACTTTCCTGAGAT 886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX759717.1 GI:32254333
                                                                                                                             909 GATCAGATTATCATCAC 925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GATCACTCTCCTGAGTT 17
                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 380
AX759717
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                               RESULT 379
                                                                                                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                           AX759333
LOCUS
                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Db
                                                                                                                                                               g
```

```
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 17-JUL-2003
                                                                                                                                                       PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                     Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                    Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match

4.2%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 82.4%; Pred. No. 3.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human prostate cancer candidate protein 1 Patent: WO 03050284-A 1671 19-JUN-2003; Amersham Biosciences (SV) Corp. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent: WO 03040369-A 5664 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX783340 17 bp DNA Sequence 1671 from Patent WO03050284. AX783340
                                                                                                                                                         AX762343 17 bp DNA
Sequence 5664 from Patent WO03040369.
AX762343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901 GCTTCTGCGATCAGATT 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX783340.1 GI:32951189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               896 TCTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                             AX762343.1 GI:32256959
800 GAGCICICCICCAACIC 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17 GCTTCTGCAATCCGAGT 1
                                        1 carcicirciccaacic 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 TCTCTGCTTCTCATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                             Homo sapiens (human)
```

construct"

```
Kit and method for determining HLA type
Patent: WO 0192572-A 603 06-DEC-2001;
NISSHINBO INDUSTRIES INC, SYSTEM RESEARCH INC, HIDETOSHI INOKO, TAEKO
KAGIYA, TATSUO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA,MICHIO
NISHIDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                08/758314 PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 占
                                                                                                  Tatificial sequences.

Kaiser, M.W., Lyamichev, V.I. and Lyamicheva, N.

Kaiser, M.W., Lyamichev, V.I. and Lyamicheva, N.

FEN-1 endonucleases, mixtures and cleavage methods

THIRD WAVE TECHNOLOGIES INC

SATAILicial Sequence

Phy 19 2001526526-A/138

PD 18-DEC-2001

PR 25-NOV-1997 UP 1998524043

PR 26-NOV-1997 UP 1998524043

PR 25-NOV-1997 US 08/757653, 02-DEC-1996 US 08/758314 P.

MICHABL W KAISER, VICTOR I LYAMICHEV, NATASHA LYAMICHEVA PC

C1201/34, C1201/44, C1201/68, C12P19/34, C12N1/20 PC

C1201/36, C07H21/04,

CC Description of Artificial Sequence: Synthetic FH Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   artificial sequences.

1 (bases 1 to 17)

Inoko, H., Kagiya, T., Ichihara, T., Matsumura, Y., Moriya, S. and Nishida, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-DEC-2001
01-JUN-2001 WO 2001JP004662
01-JUN-2000 JP 00P 164798
HIDETOSHI INOKO,TAEKO KAGIYA, TATSUO ICHIHARA,YOSHIYUKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ٠,
                                                                                                                                                                                                                                                                                                                                                                                                                                         organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          'organism='Artificial Sequence'
   FEN-1 endonucleases, mixtures and cleavage methods.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.2%; Score 12.2; DB 1; Length 132.4%; Pred. No. 3.9e+02;
ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C12Q1/68,C12M1/00,C12N15/09,G01N33/53
Description of Artificial Sequence:capture
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kit and method for determining HLA type. BD104499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SHOGO MORIYA, MICHIO NISHIDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Artificial Sequence
WO 0192572-A/603
                                BD095925.1 GT:22641513
JP 2001526526-A/138.
synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           892 TACTTCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD104499.1 GI:22650073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 racriagcadcricirc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO 0192572-A/603.
synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Artifi
PN WO 011
PN WO 016-DE
PN 01-JUD
PN 11-DE
PN 11-DE
PN C12QL
CC DESCT:
FH KEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                    SOURCE
ORGANISM
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD104499
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                   ACCESSION
                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 384
                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
ö
                                                                                                                                                                                                                                                                                PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD201187

Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 17)
Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nishida,M.
Kit and method for determining HLA type
Patent: WO 0192572-A 855 06-DEC-2001;
NISSHINBO INDUGTRIES INC, SYSTEM RESEARCH INC, HIDETOSHI INOKO, TA
KAGIYA, TATSUO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA, MICHIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Цď
                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 17)
Inoko,H., Kagiya,T., Ichihara,T., Matsumura,Y., Moriya,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Artificial Sequence
WO 0192572-A/855
06-DEC-2001
01-JUN-2001 WO 2001JP004662
01-JUN-2000 JP 00P 164798
HIDETOSHI INOKO,TAEKO KAGIYA,TATSUO ICHIHARA,YOSHIYUKI
                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·.
                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Artificial Sequence
PN W0 192572-A/855
PD 06-DEC-2001
PP 01-UNA-2001 WO 2001JP004662
PR 01-JUN-2001 WO 2001JP004662
PR HIDETOSHI INOKO, TAEKO KAGIYA, TATSUO ICHIHARA, MATSUMURA, PI MOGGO MORIYA, MICHIO NISHIDA PC C12Q1/68, C12M1/00, C12N15/09, G01N33/53
PC Description of Artificial Sequence: capture FF Key Loadion/Qualifiers
FT source //organism='Artificial Sequence FT
                                                                                                             Indels
                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Indels
                                                                        Score 12.2; DB 1;
Pred. No. 3.9e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.2%; Score 12.2; DB 1; 82.4%; Pred. No. 3.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                               Kit and method for determining HLA type.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
/organism="synthetic co
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                              825 CIGICICITITICITC 841
                                                                                                                                                                                                                                                                                                             BD104751
BD104751.1 GI:22650325
WO 0192572-A/855.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     825 CTGTGTCTCTTTCTTC 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD201187.1 GI:33010957 JP 2002509721-A/4213. Homo sapiens (human) Homo sapiens
                                                                                                                                                                   1 CTGAGTGTCATTTCTTC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 creacitarinitrici 17
                                                                       ch 4.2%;
1 Similarity 82.4%;
14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                     Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                            BD104751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NISHIDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                               KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                      RESULT 385
BD104751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 386
BD201187/c
                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                              ò
                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

```
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unknown.
              Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sonrce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 390
AR073045
                                                                                                                                                                                                                                                                                                             RESULT 389
AR063241
LOCUS
                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
FEATURES
           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                       REFERENCE
                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 04-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 29-SEP-1999
                                                                                                                                                                                      AG1P29/00,
pc AG1P35/00,AG1P43/00,C12N5/10,C12N9/00//AG1K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                        Homo sapiens (human)
1P 2002509721-A/4213
02-APR-2002
24-MAR-1999 JP 2000541291
27-MAR-1999 US 60/079678
PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, JAMES A MCSWIGGEN
                                                                                                                                                                     Ы
Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response Patent: JP 2002509721-A 4213 02-APR-2002; RIBOZYME PHARMACEUTICALS INC
                                                      OS Homo sapiens (human)
PN JP 202509721-A/4213
PD 02-ARR-1999 JP 2000541291
PR 27-MAR-1999 US 60/079678
PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHO
PI JAMES A MCSWIGGEN
CLINIS/09, AGIK31/7088, AGIK31/7125, AGIK48/00, AGIP3/10, AGIP17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                            Method and reagent for treating diseases or conditions concerning molecule participating in vacual cesponse fey Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    You,Q.
Materials and methods for species-specific detection of mycobacterium kansasii nucleic acids Patent: US 5747259-A 2 05-MAY-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                   /organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 3.9e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 4.2e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR036682 1 from patent US 5800811.
AR036682 1 G:5954538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 bp
5747259.
                                                                                                                                                                                                                                                                                                                               1. .17
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2 from patent US
                                                                                                                                                                                                                                                                                                                                                                                                                                                             959 CCAAATTGACTCTCTAA 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        709 GAGICCCAGGAGAGIGA 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR004600.1 GI:3965479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 GAGTGCCAGGAGACAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 ccaaarrcaarrrcrga 1
                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 82.49
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 18)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                C12N5/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR004600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                   PC
                                                                                                                                                                                                                               ပ္ပ
                                                                                                                                                                                                                                                          SE EE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 388
AR036682
LOCUS
                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 387
AR004600/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
    TITLE
                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
```

```
·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 28-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
That is the state of the state 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 4.2%; Score 12.2; DB 1; Length 18; Best Local Similarity 82.4%; Pred. No. 4.2e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic triple helix-forming compound precursors Patent: US 5844110-A 2 01-DEC-1998; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.2%; Score 12.2; DB 1; Length 1
82.4%; Pred. No. 4.2e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match

4.2%; Score 12.2; DB 1;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 18)
Baker, B.F. and Cowsert, L.M.
Antisense inhibition of Elk-1 expression
Patent: US 5948660-A 18 07-SEP-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR073045 18 bp 1
Sequence 18 from patent US 5948680.
AR073045. GI:9999808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR063241 18 bp
Sequence 2 from patent US 5844110.
AR063241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                         /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          828 IGTCTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         915 ATTATCATCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 TICTITITICITICE 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 Arcarcarcarcacac 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR063241.1 GI:5990932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 18)
Gold, B.I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
```

PAT 17-JUL-2003

for

ö

Gaps

.; 0

RESULT 391 AR085586/c

ð

DEFINITION

LOCUS

ACCESSION

VERSION KEYWORDS

ORGANISM

SOURCE

REFERENCE

source

AUTHORS TITLE JOURNAL FEATURES

```
L TIMOTHY A VIKKARS
C12N15/09,C07B61/00,C07B61/00,C12Q1/68,G06F17/30,G06F17/50, PC
C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
artificial sequences.
1 (bases 1 to 18)
Cowsert, L.M., Baker, B.F., Mcneil, J., Freier, S.M., Sasmor, H.M.,
Brooks, D.G., Ohasi, C., Wyatt, J.R., Borchers, A.H. and Vikkars, T.A.
Identification of genetic targets for modulation by
oligonucleotides and generation of oligonucleotides for gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DOUGLAS G BROOKS, CARA OHASI, JACQUELINE R WYAIT, ALEXANDER H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PF 13-APR-1999 JP 2000543647
PR 13-APR-1999 US 60/081483,28-APR-1998 US 09/067638 PLIEX M COWSERT, BRENDA F BAKER, JOHN MCNEIL, SUSAN M FREIER, HENRI M SASMOR,
PI DOUGLAS G BROOVE CHANGE OF THE COMPANY OF THE COMPANY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD250658 18 bp DNA linear PAT 17-JJ Identification of genetic targets for modulation by oligonuclectides and generation of oligonuclectides for gene modulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ce 1. .18 /organism='Artificial Sequence' Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
4.2%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                  Query Match 4.2%; Score 12.2; DB 1; Length 18; Best Local Similarity 82.4%; Pred. No. 4.2e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Identification of genetic targets for modulation by oligonucleotides and generation of oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modulation
Patent: JP 2002511276-A 150 16-APR-2002;
ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002511276-A/150
PD 16-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1..18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
Antisense modulation of SRA expression
Patent: US 6107092-A 141 22-AUG-2000;
Location/Qualifiers
                                                                                                                /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            873 CACTITCCTGAGAIGCA 889
                                                                                                                                                                                                                                                                                                                         842 TCTGAAGACAGCGTCCT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD250596.1 GI:33060366
JP 2002511276-A/150.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CACTTTCCTGTGAGCCA 17
                                                                                                                                                                                                                                                                                                                                                                               1 rcreaaacaeacrecr 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    당표합된
   TITLE
JOURNAL
                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 394
BD250596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD250658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 14-FEB-2001
                                                                                                                                                                                                              PAT 01-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknow...
Unknow...
I (bases i to 18)
Cowsert, L. M., Bennett, C. Frank, and O'Malley, B.W.
Antisense modulation of SRA expression
Patent: US 6107092-A 71 22-AUG-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 18)
Cowsert,L.M., Bennett,C.Frank. and O'Malley,B.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense modulation of G-alpha-13 expression Patent: US 5981732-A 22 09-NOV-1999; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 4.2%; Score 12.2; DB 1; Best Local Similarity 82.4%; Pred. No. 4.2e+02; Matches 14; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 12.2; DB 1;
Pred. No. 4.2e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR106980 18 bp D1
Seguence 141 from patent US 6107092.
AR106980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .18
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR106910 18 bp I
Sequence 71 from patent US 6107092.
AR106910
                                                                                                                                                                                                  AR085586 18 bp 1
Sequence 22 from patent US 5981732.
AR085586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .18
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841 CICIGAAGACAGCGICC 857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR106980.1 GI:12821510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     710 AGTCCCAGGAGAGTGAC 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR106910.1 GI:12821440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCTGAAACAGACTCC 18
            926 CACCACCTCCAGAGAA 942
                                                                                                                                                                                                                                                                                                   AR085586.1 GI:10012353
                                                                  1 caccaccarcccgrgaa 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 AGTCCAAGGAGATCGAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 82.4;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.
1 (bases 1 to 18)
Cowsert, L.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown
                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7
```

DEFINITION ACCESSION VERSION KEYWORDS

RESULT 392

g

AR106910 LOCUS

ORGANISM

SOURCE

source

JOURNAL FEATURES

AUTHORS TITLE

REFERENCE

RESULT 393 AR106980

ð

DEFINITION

rocus

ACCESSION VERSION

ORGANISM

KEYWORDS SOURCE

REFERENCE

AUTHORS

둽

PAT 17-JUL-2003

0;

Gaps

..

```
2 ATCATCATCATCAC
     PC (C12N15/6
CC strandedr
CC topology:
CC hypothetis
CC anti-sens
FH Key
FT source
FT source
FT
                                                                                                                                                                                                                                                                                 Ouery Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OS
PP
PP
PP
PC
PC
CC
CC
CC
FH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sonrce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                Ы
                                                                                                                                                                                                                                                                                                                                                                         TIMOTHY A VIXKARS
C12N15/09,C07B61/00,C07B61/00,C12Q1/68,G06F17/30,G06F17/50, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    E07881 18 bp DNA linear PAT 29-SEP-1997 PCR primer for gaining surface antigen protein of hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E TOBSES I to 18)
Saco, T., Takamura, C., Yasuda, A., Kamogawa, K. and Yasui, K.
PRODUCTION OF CHIMERAL PROTEIN HAVING ANTIGEN SITE OF SURFACE
ANTIGEN PROTEIN OF OAPAMESE ENCEPHALITIS VIRUS AND HEPATITIS B
VIRUS AND RECOMBINANT BACHLOVIRUS THEREFOR
VIRUS AND RECOMBINANT BACHLOVIRUS THEREFOR

NIPPON ZEON CO LTD, TOKYO MET GOV SHINKE! KAGAKU SOGO KENKYUSHO
OS NONe
OATIficial sequences.
PN JP 1994205672-A/3
PD 26-JUL-1994
PF 19-MAR-1992 JP 1992053699
PF SATO TAKANORI, TAKAMURA CHIZUKO, YASUDA ATSUSHI, PI KAMOGAWA
KOICHI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KAMOGAWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YASUT KCTARO
C12N7/01,A61K39/155,A61K39/29,A61K39/295,C12N15/62,C12N15/86,
C12P21/02,
                                            synthetic construct
synthetic construct
synthetic construct
synthetic construct
a squences.

1 (bases 1 to 18)
Cowsert,L.M., Baker,B.F., Mcneil,J., Freier,S.M., Sasmor,H.M.,
Brooks,D.G., Ohael,C., Wyatt,J.R., Borchers,A.H. and Vikkars,T.A.
Identification of genetic targets for modulation by
oligonucleotides and generation of oligonucleotides for gene
                                                                                                                                                                                                                                                                                                09/067638 PI
                                                                                                                                                                                                                                                                        PF 13-APR-1999 UP 2000543647
PR 13-APR-1998 US 60/081483,28-APR-1998 US 09/067638 P
LEX M COMSERT, BRENDA F BAKER, JOHN MCNEIL, SUSAN M FREIER, HENRI
                                                                                                                                                                                                                                                                                                                                         DOUGLAS G BROOKS, CARA OHASI, JACQUELINE R WYATT, ALEXANDER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.2%; Score 12.2; DB 1; Length 18; 32.4%; Pred. No. 4.2e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism='Artificial Sequence' Location/Qualifiers
                                                                                                                                                                                         Patent: JP 2002511276-A 212 16-APR-2002; ISIS PHARMACEUTICALS INC
OS Artificial Sequence
ND J 2002511276-A/212
PD I -APR-2002
PF 13-APR-1999 JP 2000543647
PR 13-APR-1999 US 60/081483,28-APR-1
                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense Oligonucleotide
                  BD250658.1 GI:33060428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         926 CACCACCTCCAGAGAA 942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACCACCATCCCGTGAA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E07881
E07881.1 GI:2176013
                                 JP 2002511276-A/212.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JP 1994205672-A/3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unidentified
                                                                                                                                                                                                                                                                                                                                                                                                           C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                             BORCHERS,
                                                                                                                                                                                                                                                                                                                               SASMOR
                                                                                                                                                                                                                                                                                                                           M S
PI
                                                                                                                                                                                                                                                                                                                                                                         PI
                                                                                                                                                                                                                                                                                                                                                                                                                          FEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
ACCESSION
               VERSION
KEYWORDS
SOURCE
                                                                                             REFERENCE
                                                                                                                                                                                              JOURNAL
                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E07881/c
                                                                                                                                              TITLE
                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
```

à

```
E39157

18 bp DNA linear PAT 18-JUN-2001 DNA encoding novel fused protein and process for producing useful protein mediating the expression thereof.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 18)
Seiji,S., Masahiko,H., Toshiyuki,K. and Masaaki,K.
DNA encoding novel fused protein and process for producing useful protein mediating the expression thereof Patent: JP 199341991-A 3 14-DEC-1999;
ITO HAM KK,JUZO UDAKA
ON Artificial Sequence
NO PLEC-1999
PD 14-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C07K19/00, (C12N15/09, C12R1:08), (C12N1/21, C12R1:08), (C12P21/02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEIJI SATO,MASAHIKO HIGASHIKUJI,TOSHIYUKI KUDO,MASAAKI KONDO C12N15/09,C12N1/21,C12P21/02,C2P21/02//C07K14/605,C07K14/65,
                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                   F
                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                   /organism='Artificial sequences'
                                                                                                                                                                                                                            'note='PCR primer named P-HBR'.
                                                                                                                                                                                                                                                                                                                                                                                      4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 4.2e+02; tive 0; Mismatches 3; Indels

    .18
/organism='Artificial Sequence'

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
(C12N15/62,C12R1:92), (C12P21/02,C12R1:91);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.2%; Score 12.2; DB 1;
32.4%; Pred. No. 4.2e+02;
ve 0; Mismatches 3;
                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers

    .18
    forganism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C12R1:08),
C12N15/00, (C12N15/00,C12R1:08)

    .18
    /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-MAR-1999 JP 1999089488
                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                       strandedness: Single;
topology: Linear;
hypothetical: No;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             755 GGGTCCCTAGGCCTCCA 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      915 ATTATCATCACCACCAC 931
                                                                                                                                                                                                         1. .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:13019231
                                                                                            anti-sense: No;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 ééércéceáéreeréea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E39157.1 GI:130197
JP 1999341991-A/3.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
```

ô

```
AR215598.1 GI:23313854
                                                                                                                                                                                                                                                                                                                                                                                                                               873 CACTITCCIGAGAIGCA 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR274624.1 GI:29707158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       915 ATTATCATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR274625.1 GI:29707159
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CACTTTCCTGTGAGCCA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 ATCATCATCATCATCAC 18
                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                          Unknown
                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 402
AR274625/c
                                                                                       DEFINITION
                                                                                                                                                                           ORGANISM
                                      RESULT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                     VERSION
KEYWORDS
SOURCE
                                                                                                         ACCESSION
                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                        AR215598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR274624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                         E39158.1

S JP199341991-A/4.

S JP 1999341991-A/4.

SYNThetic construct
artificial sequences.

SS j1,5., Masahiko,H., Toshiyuki,K. and Masaaki,K.

DNA encoding novel fused protein and process for producing useful protein mediating the expression thereof

AL batent: JP 199341991-A/4

DNA encoding novel fused protein and process for producing useful protein mediating the expression thereof

AL DRA encoding novel fused protein and process for producing useful protein mediating the expression thereof

AL DRA DRA JUBOL DRA A 14-DEC-1999;

ITO HAM KK, UZO UDAKA
OS Artificial Sequence

PN JP 1999341991-A/4

PD 14-DEC-1999

PF 30-MAR-1999 JP 1999089488

PR SEIJI SATO, MASAHIKO HIGASHIKUJI, TOSHIYUKI KUDO, MASAAKI KONDO

PC CIZNIS/09, CIZNIS/09, CIZRI:08), (CIZNIS/00, CIZRI:08), (CIZNIS/00, CIZRI:08),

PC CIZNIS/09, (CIZNIS/00, CIZRI:08), (CIZNI/21, CIZRI:08), (CIZNIS/00, CIZRI:08),

PC CIZNI:09),

PC CIZNIS/09, (CIZNIS/00, CIZRI:08)

PC CIZNIS/00, (CIZNIS/00, CIZRI:08)

FT Source 1. 18

FT Source 7. 1. 18

FT FORMARIA PROTECT 1. 1. 18

FT FORMARIA PROTECT 1. 1. 18

FT FORMARIA PROTECT 1. 1. 18
                                   B39158 is bp DNA linear PAT 18-JUN-2001 DNA encoding novel fused protein and process for producing useful protein mediating the expression thereof.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.

1 (bases 1 to 18)
Nimni,M.E., Hall,F.L., Wu,L., Han,B. and Shors,E.C.
Bone morphogeneric proteins and their use in bone growth
Patent: US 632972-A 21 05-MAR-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 12.2; DB 1; Length 18; Pred. No. 4.2e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 12.2; DB 1;
Pred. No. 4.2e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .18
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR198571 18 bp D
Sequence 21 from patent US 6352972.
AR198571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              915 ATTATCATCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR198571.1 GI:20248420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         915 ATTATCATCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 Arcarcarcarcac 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 ATCATCATCATCAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 82.4;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown
                                                                                     E39158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14;
RESULT 398
E39158/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 399
AR198571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ПP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
```

```
PAT 25-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.

1 (Dases 1 to 18)
Sato,S., Higashikuni,N., Kudo,T. and Kondo,M.
DNAs encoding new fusion proteins and processes for preparing useful polypeptides through expression of the DNAs
Patent: US 6506595-A 8 14-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.

1 (bases 1 to 18)
Sato, S., Higashikuni, N., Kudo, T. and Kondo, M.

DNAs encoding new fusion proteins and processes for preparing useful polypeptides through expression of the DNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                          Unclassified.

1 (bases 1 to 18)

Roberts,M.L. and Cowsert,L.M.
Antisense modulation of human Rho family gene expression
Patent: US 6410323-A 146 25-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           o,
                                                                                                                                                                                                                                                                                                                                                                                                   th 4.2%; Score 12.2; DB 1; Length 18; Similarity 82.4%; Pred. No. 4.2e+02; 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 4.2%; Score 12.2; DB 1; Length 18; Best Local Similarity 82.4%; Pred. No. 4.2e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
Ak215598 18 bp DN Sequence 146 from patent US 6410323.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 bp
Sequence 8 from patent US 6506595.
AR274624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 9 from patent US 6506595.
AR274625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                          1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .18
/organism="unknown"
```

```
Query Match
Best Local Similarity
Matches 14; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.
                                                                                                                              Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                      Unknown.
                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                      18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                 DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                           source
            RESULT 405
AR295578/c
                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 407
AR303207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                               RESULT 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                             REFERENCE
                                                                                                                                                         AUTHORS
                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                          AR299797
                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Q
O
                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                        0;
                                                                                                                                                                                                                         PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                             (driffths, A.D.), Hoogenboom, H.R.J.M., Marks, J.D., McCafferty, J., McGafferty, J., Hoogenboom, H.R.J.M., Marks, J.D., McCafferty, J., Winter, G.P. and Grigg, G.W. Production of anti-self antibodies from antibody segment repertoires and displayed on phage Patent: US 65214044 A. 13 18 FEB-2003; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a high density
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .,
                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.2%; Score 12.2; DB 1; Length 18; 32.4%; Pred. No. 4.2e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 4.2e+02; Live 0; Mismatches 3; Indels
                                                                            Length 18;
                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cohen, D., Chumakov I. and Blumenfeld, M. Balallelic markers for use in constructing disequilibrium map of the human genome Patent.. US 6537751-A 5267 25-MAR-2003;
                                                                            4.2%; Score 12.2; DB 1; ilarity 82.4%; Pred. No. 4.2e+02; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 5267 from patent US 6537751. AR293532.1 GI:31680816
                                                                                                                                                                                                                    Sequence 13 from patent US 6521404.
AR281857
AR281857.1 GI:29717758
Patent: US 6506595-A 9 14-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                         1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                      /mol_type="genomic DNA"
               Location/Qualifiers
                              1. .18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               890 CITACITCICAGCIICI 906
                                                                                                                                  915 ATTATCATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGGGTACCTTGGCCCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18 CTTCCTTCCCATCTTCT 2
                                                                                                                                                 17 ATCATCATCATCAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       llarity 82.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 82.4 Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                    Unclassified.
                                                                              Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
Unknown.
                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                         Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                               RESULT 403
AR281857
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR293532/c
LOCUS
                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                              AUTHORS
  JOURNAL
                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 12-JUN-2003
  PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (fases 1 to 18)

Griffiths, A.D., Hoogenboom, H.R.J.M., Marks, J.D., McCafferty, J., Winter, G.P. and Grigg, G.W.
Production of anti-self antibodies from antibody segment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                [ (bases 1 to 18) Cohen, D., Chumakov, I. and Blumenfeld, M. Biallelic markers for use in constructing a high density disequilibrium map of the human genome Patent: US 6537751-A 7313 25-WAR-2003; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a high density
                                                                                                                                                                                                                                                                                                                                                                                                              ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 4.2e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                      Length 18;
                                                                                                                                                                                                                                                                                                                                                                   ch 4.2%; Score 12.2; DB 1; Length 1
1 Similarity 82.4%; Pred. No. 4.2e+02;
14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 18)
Cohen,D., Chumakov,I. and Blumenfeld,M.
Biallelic markers for use in constructing disequilibrium map of the human genome patent: US 6537751-A 11532 25-WAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 11532 from patent US 6537751.
AR299797.1 GI:31687081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
18 bp DN.
US 6537751.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 13 from patent US 6544731. AR303207
                                                                                                                                                                                                                                                                                           1. .18
/organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
  AR295578
Sequence 7313 from patent
AR295578
                                                                                                                                                                                                                                                                                                                                                                                                                                                       932 CCTCCAGAGAATTTTAC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        706 AGCGAGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR303207.1 GI:31691968
                                                                AR295578.1 GI:31682862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 AGTGAGTCCAAAGAGAG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ccrcccgrdaarrraac 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14; Conservative
```

```
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             705 CAGCGAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX111601
AX111601.1 GI:13927882
                                                                                                                                                                                                    AR353532.1 GI:33759522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 casseracerresece 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18 cagcgagicacgecga 2
1 CAGGGTACCTTGGCCCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 82.4%;
Marches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                    Unclassified.
                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 412
AX111602
                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX111601/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 411
                                                                                                                                                                            ACCESSION
VERSION
                                                                           RESULT 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                     AR353532
                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 17-AUG-2003
                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 18)
Griffiths, A.D., Hoogenboom, H.R.J.M., Marks, J.D., McCafferty, J.,
Winter, G.P. and Grigg, G.W.
Production of anti-self bodies from antibody segment repertories
and displayed on phage
Patent: US 6582915-A 13 24-JUN-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The control of a c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1; Length 18;
                                                                                                                                                                            4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 4.2e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
4.2%; Score 12.2; DB 1;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.2%; Score 12.2; DB 1; ilarity 82.4%; Pred. No. 4.2e+02; Conservative 0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
       repertories and displayed on phage
Patent: US 6544731-A 13 08-APR-2003;
Location/Qualifiers
1..18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 13 from patent US 6555313.
AR308313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13 from patent US 6582915.
AR344644
AR344644.1 GI:33740724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18 bp
                                                                                                                                /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                     753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR308313.1 GI:31699745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGGGTACCTTGGCCCC 17
                                                                                                                                                                                                                                                                                                                               1 CAGGGTACCTTGGCCCC 17
                                                                                                                                                                                                                                      14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR344644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 408
AR308313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR344644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
```

```
.;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 30-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 30-APR-2001
      PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Herrmann, J.L. Novel polynucleotides encoding proteins containing thrombospondin Novel
                                                                                                                                                            [Dases 1 to 18]
Griffiths, A.D., Hoogenboom, H.R.J.M., Marks, J.D., McCafferty, J., Winter, G.P. and Grigg, G.W.
Winter, G.P. and Grigg, G.W.
Production of anti-self antibodies from antibody segment repertoires and displayed on phage
Patent: US 6593081-A 13 15-JUL-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shimkets, R.A., Vernet, C., Tchernev, V.T., Boldog, F.L. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                       4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 4.2e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.2%; Score 12.2; DB 1;
32.4%; Pred. No. 4.2e+02;
ve 0; Mismatches 3;

    .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db xref="taxon:32630"
/noTe="Chemically Synthesized"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              type 1 repeats
Patent: WO 0123561-A 31 05-APR-2001;
Curagen Corporation (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 bp
Sequence 32 from Patent WO0123561.
AXII1602.1 GI:13927883
Sequence 13 from patent US 6593081. AR353532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX111601 18 bp
Sequence 31 from Patent WO0123561.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
KEYWORDS
```

```
Query Match
Best Local (
                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                             RESULT 415
AX599707/c
                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 416
AX661815
                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                        ò
                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hepatitis C virus
Hepatitis C virus
Viruses; ssRNA positive-strand viruses, no DNA stage; Flaviviridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 14-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 03-OCT-2002
                                                       Shimkets, R.A., Vernet, C., Tchernev, V.T., Boldog, F.L. and Herrmann, J.L.
Nevel polynucleotides encoding proteins containing thrombospondin type 1 repeats
Patent: WO 0123561-A 32 05-APR-2001;
Curagen Corporation (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pellerin, C. and Kukolj, G.
Internal de novo initiation sites of the hcv ns5b polymerase and
use thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gala,J.L. and Vannuffel,P.
Differential diagnosis for mycobacterial and pseudomonas species using species-specific upstream p34 gene region probes
Patent: EP 1233076-A 88 21-AUG-2002;
                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·;
                                                                                                                                                                                                                                                         Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
4.2%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                      4.2%; Score 12.2; DB 1; 82.4%; Pred. No. 4.2e+02;
                                                                                                                                                                            /organism="synthetic construct"
/mol_type="unassigned DNA"
/mol_type="unassigned DNA"
/note="taxon:32630"
/note="Chemically Synthesized"
                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 0183736-A 9 08-NOV-2001;
BOEHRINGER INGELHEIM (CANADA) LTD. (CA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Hepatitis C virus"
/mol_type="unassigned DNA"
/db_xref="taxon:11103"
                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 88 from Patent EP1233076.
AX513159.1 GI:23504238
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 9 from Patent W00183736. AX320839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pseudomonas sp.
Bacteria; Proteobacteria.
                                                                                                                                                                                                                                                                                                              705 CAGCGAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX320839.1 GI:17902391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           731
                                                                                                                                                                                                                                                                                                                                  1 CAGCGAGTCACGGGCGA 17
synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            715 CAGGAGAGTGACTCTGG
                                                                                                                                                                                                                                                                                  14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pseudomonas sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hepacivirus.
                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                     RESULT 413
AX320839/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX513159/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 414
                                                          AUTHORS
                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
SOURCE
                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dd
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                        PAT 14-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 22-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Berlin, K., Braun, A., Distler, J., Guetig, D., Howe, A., Mueller, J., Olek, A., Piepenbrock, C., Adorjan, P., Grabs, G., Lesche, R., Leu, B., Lewin, A., Lipscher, E., Maier, S., Model, F., Mueller, V., Otto, T., Pelet, C. and Ziebarth, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Methods and nucleic acids for the analysis of hematopoietic cell
proliferative disorders
Patent: WO 02072272-A 1047 03-OCT-2002;
Epigenomics AG (DE)
                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                  4.2%; Score 12.2; DB 1; Length 18; 32.4%; Pred. No. 4.2e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          for C-ABL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 18;
                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Detection oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.2%; Score 12.2; DB 1;
82.4%; Pred. No. 4.2e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1..18
/organism="synthetic construct"
/mol_type="unassigned bNA"
/db xref="teaxon:32630"
/note="Hybridization Tag"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hinkel, C.A., Kimmerly, W.J. and Yang, L. Methods of analysis of nucleic acids Patent: WO 02061121-A 29 08-AUG-2002; Syngenta Participations AG (CH) Location/Qualifiers
                                                           /mol_type="unassigned DNA"
/db_xref="taxon:306"
                                                                                                                                                                                                                                                                                                                                                                    AX599707 18 bp DNJ
Sequence 1047 from Patent WO02077272.
AX599707
UNIVERSITE CATHOLIQUE DE LOUVAIN (BE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 29 from Patent W002061121.
AX661815
AX661815.1 GI:29162878
                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                               919 TCATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                               AX599707.1 GI:28399855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 921 ATCACCACCACCTCCA 937
                                                                                                                                                                                                                                                                         17 rearceceácerrecre 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18 ACCACCACGCCCTCAA 2
                                                                                                                                                                 l Similarity 82.4%;
14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX661815
```

d

PAT 08-OCT-2003

linear

```
Adorjan, P., Burger, M., Maier, S., Nimmrich, I., Becker, E., Lesche, R., Rujan, T. and Schmitt, A. Method and nucleic acids for the analysis of a colon cell proliferative disorder

Batent: EP 1340818-A 70 03-SEP-2003;

Epigenomics AG (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                               Zeng, S., Bogner, F.M., Kunert, R., Mueller, D. and Unterluggauer, F. Cell culture process
Patent: WO 03045995-A 18 05-JUN-2003;
BIOCHEMIE Gesellschaff m.b.H. (AT)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
4.2%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 12.2; DB 1;
Pred. No. 4.2e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                  Sequence 18 from Patent WO03045995.
AX799932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 70 from Patent WO03072821. AX825818
AX825818.1 GI:39751332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX822178 18 bp
Sequence 70 from Patent EP1340818.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .18
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           973 TAAAICTGGTGTATGGG 989
                                                                                                                                                                               AX799932.1 GI:37605420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX822178
AX822178.1 GI:39748806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               754 AGGGTCCCTAGGCCTCC 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17
                    1 raactrigerereee 17
                                                                                                                                                                                                                  synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 82.4%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 TAACTTTGGTGTCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 AGGGTCCCGCGGACTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 421
AX825818/c
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                             RESULT 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 420
AX822178/c
                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                    AX799932
                                                                                                                                                                                                                                                                                                                                                                             PEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                        ö
                                                                                                                                                                                                                    PAT 02-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 09-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                       Ferrara, N., Stewart, T.A., Williams, P.M., Baker, K.P., Desnoyers, L., Baton, D.L., Gao, W.Q., Pan, J., Botstein, D., Fong, S., Goddard, A., Godowski, P.J., Gurney, A.L., Smith, Y., Tumss, D., Wood, W.I., Grimaldi, C.J., Hillan, K.J., Paoni, N.F., Roy, M.A. and Watanabe, C.K. Secreted and transmembrane polypeptides and nucleic acids encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent: WO 03046162-A 12 05-JUN-2003;
Polymun Scientific Immunbiologische Forschung GmbH (AT); Katinger,
Hermann (AT); Kunert, Remate (AT); Mueller, Dethardt (AT);
Unterluggauer, Florian (AT)
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Katinger, H., Kunert, R., Mueller, D. and Unterluggauer, F.
Process for the production of polypeptides in mammalian cell
                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 4.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
4.2%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 18;
                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

4.2%; Score 12.2; DB 1;
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .18
/organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Epo 221 for primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent: WO 0078961-A 256 28-DEC-2000;
Genentech Inc. (US)
Location/Qualifiers
                                      0; Mismatches
                                                                                                                                                                                                            Sequence 256 from Patent WO0078961. AX697188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18 bp I
Sequence 12 from Patent W003046162.
AX774027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                           821 TIGGCIGIGICICITIT 837
                                                                                                                                                                                                                                                                         AX697188.1 GI:29498134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  854 GTCCTGGCTCCAGTTGG 870
                                                                                                                17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX774027.1 GI:32485853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct
synthetic construct
artificial sequences.
                                                                                                                  TTCGCTGTGGCTCTGTT
                Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cultures
Query Match
                                                                                                                                                                                       AX697188
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                       RESULT 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
```

JOURNAL

TITLE

FEATURES

; 0

Gaps

0

Length 18;

PAT 11-DEC-2003

linear

. 0

Gaps

.,

PAT 11-DEC-2003

linear

973 TAAATCTGGTGTATGGG 989

REFERENCE AUTHORS

TITLE

KEYWORDS

AX774027

JOURNAL

FEATURES

```
Sequence 148 from patent US 5861244.
AR029959
AR029959.1 GI:5943173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .13
/organism="unknown"
                                                                                                                                                                               1. .12
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR192993.1 GI:20238958
                                                                                                                                                                                                                                                                                                                                                                                                                                     AR030082.1 GI:5943296
                                                                                                                                                                                                                                                                                            831 CTCTTTTCTTCT 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   833 CTTTTCTTCT 844
                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                            12 CTTTTCTTCTCT 1
                                                                          Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                 l Similarity
12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                   Best Local
                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                               AR030082/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                               JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                   RESULT 424
                ACCESSION
VERSION
                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                      REFERENCE
                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR192993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
synthetic construct
synthetic construct
artificial sequences.
I (bases 1 to 18)
S Lok,S., Kho,C.J., Jelmberg,A.C., Adams,R.L., Whitmore,T.E. and
Farrah,T.M.
Cytokine 7 receptor
Patent: JP 2001514493-A 3 11-SEP-2001;
ZYMOGRNETICS INC
PA 11-SEP-2001
P 1-SEP-1998 JP 1998536782
PF 18-FEB-1999 US 08/903305,02-OCT-1997 US 08/943087 PI
ST 20-FEB-1997 US 08/903305,02-OCT-1997 US 08/943087 PI
SI LOK,CHOON J KHRAH
PT THERESA M FARRAH
PC C12N15/12,C07K14/715,C12N15/62,C07K16/28,C07K16/42,C07K19/00,
PC G1N33/50
CC Strandedness: Single;
CC Topology: Linear;
FH KEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 29-SEP-1999
                                                                             1
Adorjan, P., Burger, M., Maier, S., Nimmrich, I., Becker, E., Lesche, R.,
Kujan, T. and Schmitt, A.
Method and nucleic acids for the analysis of a colon cell
proliferactive disorder
Patent: WO 03072821-A 70 04-SEP-2003;
Epigenomics AG (DE)
                                                                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THERESA M FARRAH
C12N15/12,C07K14/715,C12N15/62,C07K16/28,C07K16/42,C07K19/00,
G01N33/50
                                             Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 82.4%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 12.2; DB 1; Length 18;
Pred. No. 4.2e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA

    .18
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ď
                                                                                                                                                                                                                                                                                                                                                                                                                            ďq
                                                                                                                                                                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12
                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                        BD057516
Cytokine 7 receptor.
BD057516.1 GI:22603122
JP 2001514493-A/3.
                                                                                                                                                                                                                                                                                                                          754 AGGGTCCCTAGGCCTCC 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  820 GIIGGCIGIGICICITI 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ecresererrrererr 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.2%;
                                                                                                                                                                                                                                                                                                                                                    17 AGGGTCCCGCGGACTCC 1
                Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 82.4'
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR029959
                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 423
AR029959
LOCUS
                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                               BD057516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
      KEYWORDS
                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                            ö
```

```
·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 20-APR-2002
                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
Unclassified.
1 (bases 1 to 15)
Pavco, P., McWiggen, J., Stinchcomb, D. and Escobedo, J.
Rethod and reagent for the treatment of diseases or conditions related to levels of vaccular endothelial growth factor receptor Patent: US 6346398-A 8481 12-FEB-2002;
                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.

1 (bases 1 to 13)
Wang, C.-G. and Hepburn, A.G.
Genetic sequence assay using DNA triple strand formation
Patent: US 5861244-A 271 19-JAN-1999;
Location/Qualifiers
1 (bases 1 to 12)
Wang, C.-G. and Hepburn, A.G.
Genetic sequence assay using DNA triple strand formation
Patent: US 5861244-A 148 19-JAN-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                ·;
                                                                                                                                                                                                    4.1%; Score 12; DB 1; Length 12; 100.0%; Pred. No. 2.9e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.1%; Score 12; DB 1; Le
llarity 100.0%; Pred. No. 3.2e+02;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR192993 15 bp DNA Sequence 8481 from patent US 6346398. AR192993
                                                                                                                                                                                                                                                                                                                                                                                                                                         AR030082 13 bp DN
Sequence 271 from patent US 5861244.
AR030082
                                                                                                                                                         /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
```

Matches

RESULT 426

g

AR326734 LOCUS

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Buchases 1 to 17)

Galvin, M., Miller, A., Penny, L. and Riedy, M.
Ganotype determination of human UDP-glucuronosyl transferase 2B4
(UGT2B4), 2B7 (UGT2B7) and 2B15 (UGT2B15) genes

L. Patent: JP 2002521067-A 18 16-JUL-2002;
AXYS PHARMACEUTICALS INC
OS Homo sapiens (human)
PN JP 2002521067-A/18
PD 16-JUL-1999 UP 2000562558
PP 22-JUL-1999 UP 2000562558
PR 28-JUL-1999 US 60/094391
                                                                                                                                                                                                                                                                                                                                                             OC ENZYMENTIC MUCIES AND CONTROL OF CONTROL 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Enzymatic nucleic acid treatment of diseases or conditions CC
                                                                                                                                                     unidentified
unclassified.
unclassified.
labers 1 to 15)
Blatt,L., Mcswiggen,J.A., Roberts,E., Pavco,P.A. and Macejak,D.
Enzymatic nucleic acid treatment of diseases or conditions related
to hepatitis C virus infection
Patent: JP 2002512791-A 2386 08-MAY-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,A61K37/66,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genotype determination of human UDP-glucuronosyl transferase 2B4 (UGT2B4), 2B7 (UGT2B7) and 2B15 (UGT2B15) genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OS Homo sapiens (funman)

PN JP 2002521067-A/18

PD 16-UUL-1999 JP 2000562558

PR 28-UUL-1999 UP 60/094391

PR ARGARET CALVIN ANDEW MILLER, LAURA PENNY, MICHAEL RIEDY PC (12M15/09,C12M15/00,C12M15/00,C12M15/00,C12M15/00,C12M15/00,C12M15/00,CC Genotype determination of human UDP-glucuronosyl transferase CC

    .15
/organism='Hepatitis virus (hepatitis C

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 12; DB 1; Length 15; 100.0%; Pred. No. 3.7e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unidentified"
/mol_type="genomic RNA"
/db xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                hepatitis C virus infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 bp
                      hepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD229146.1 GI:33038916
JP 2002521067-A/18.
                         to hepatitis C virus inf
BD208796
BD208796.1 GI:33018566
JP 2002512791-A/2386.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           virus)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      related to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        856 CCTGGCTCCAGT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 ccrescrecasr 12
                                                                                                                                 unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BD229146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                당표보험
                                             ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 429
BD229146
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 01-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD208796 15-JUL-2003 Enzymatic nucleic acid treatment of diseases or conditions related
                                                                              ö
                                                                                                                                                                                                                                                                                                                           PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 15)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127,A 4136 20-MAY-2003;
                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
; DB 1; Leus
10. 3.7e+02;
0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 12; DB 1; Length 15;
Pred. No. 3.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 12; DB 1; Length 15; 85.7%; Pred. No. 3.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    i; Indels
                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Choi,J.Y., Koshy,B., Kliem,S. and Stephens,J.C. Haplotypes of the alas2 gene Patent: WO 0210454-A 38 07-FEB-2002; Genaissance Pharmaceuticals, Inc. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.1%; Scc. No. J. 100.0%; Pred. No. J. J. Wismatches
        4.1%; Scc...
100.0%; Pred. No. ...
                                                                                                                                                                                                                                                                                                                Sequence 4136 from patent US 6566127. AR326734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .15
/organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15 bp
Sequence 38 from Patent W00210454.
AX374617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                          AR326734.1 GI:33712542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX374617.1 GI:19169514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             779 GGGCAGCCCCTCTG 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                800 GAGCTCTCCTCC 811
                                                                                                                                    800 GAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGCTCTCCTCC 12
                                                                                                                                                                                       GAGCTCTCCTCC 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best_Local Similarity
Matches 12; Conser
                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD208796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 428
BD208796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
```

DEFINITION ACCESSION

VERSION KEYWORDS

ORGANISM

SOURCE

JOURNAL

TITLE

FEATURES

AUTHORS

REFERENCE

RESULT 427 AX374617

LOCUS

source

JOURNAL

FEATURES

Matches

ò d

ORGANISM

SOURCE

REFERENCE AUTHORS

TITLE

ó

Gaps

. 0

ŁΙ

PAT 17-JUL-2003

0;

Gaps

.,

PAT 20-APR-2002

RESULT 430 BD241289 LOCUS DEFINITION ACCESSION

ORGANISM

SOURCE

VERSION KEYWORDS

REFERENCE AUTHORS TITLE JOURNAL

Matches

ð

FEATURES

```
1 (bases 1 to 17)
Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 4364 12-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dasce I to 17)
Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Pavco,P., and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 4365 12-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J. McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J. Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 656127-A 2131 20-MAY-2003; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
4.1%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.3e+02;
Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
4.1%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.3e+02;
Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                             4.1%; Score 12; DB 1; Le
100.0%; Pred. No. 4.3e+02;
ative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2131 from patent US 6566127.
AR324729
AR324729.1 GI:33710537
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR188877 17 bp DNA Sequence 4365 from patent US 6346398.
                                                                                                                                                1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unknown"
/wol_type="unassigned RNA"
                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR188877.1 GI:20234842
                                                                                                                                                                                                                                                                                                            800 GAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            800 GAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                      12; Conservative
                                                                                                                                                                                                                                                                                                                                                     4 GAGCTCTCCTCC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 GAGCTCTCCTCC 13
      Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR188877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                   AR188877
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR324729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa, Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 17)

E Landers, J. E., Jordan, B., Housman, D.E. and Charest, A.

Methods and products related to genetyping and DNA analysis

D Patent: JP 200252127-A 236 13-AUG-2002;

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

P HOTO sapplens (human)

PN JP 200252117-A/236

ED 13-AUG-2002

PR 24-SRP-1999 US 60/110757

PR 25-SEP-1998 US 60/110757

PI JOHN E LANDERS, BARBARA JORDAN, DAVID E HOUSMAN, ALAIN CHAREST PC
                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ^{PC}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C12N15/00
Methods and products related to genotyping and DNA analysis FH
bocation/Qualifiers
Y
source 1...17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7 24-SEP-1999 JP 2000572407
25-SEP-1998 US 60/101757
I JOHN E LANDERS, BARBARA JORDAN, DAVID E HOUSMAN, ALAIN CHAREST P
C12N15/09, C12Q1/68, G01N33/53, G01N33/566, G01N33/58, G01N37/00, PC
                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        שנוב-17 DNA linear PAT 17-טן Methods and products related to genotyping and DNA analysis.
BD241289
                                                                                                                                                                                                                                                                      .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .,
                                                                  /organism='Homo sapiens (human)'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism='Homo sapiens (human)'.
Location/Qualifiers
                                                                                                                                                                                                                         4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 4.3e+02; Attive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 4.3e+02; trive 0; Mismatches 0; Indels
              2B7 (UGT2B7) and 2B15 (UGT2B15) genes
Key Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4364 from patent US 6346398.
AR188876.1 GI:20234841
                                                                                                                     1. .17
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD241289.1 GI:33051059
JP 2002525127-A/236.
Homo sapiens (human)
Homo sapiens
2B4 (UGT2B4)
                                                                                                                                                                                                                                                                                                          958 GCCAAATTGACT 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                926 CACCACCTCCA 937
                                                                                                                                                                                                                                                                    12; Conservative
                                                                                                                                                                                                                                                                                                                                 CACCACCTCCA 14
                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  G01N37/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FT
```

0;

Gaps

0;

PAT 17-AUG-2003

ô

Gaps

0;

DEFINITION ACCESSION

RESULT 431 AR188876

ð g LOCUS

FEATURES

ORGANISM

VERSION KEYWORDS SOURCE

```
800 GAGCICICCICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR349398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR349398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
FEATURES
                                                 JOURNAL
                                                                                                                                                                                                                                       RESULT 43'
AR329519
                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR349398
                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                           ð
                                                                                                                                                                                                  임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                       ;
                                                                                     PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 17-AUG-2003
                                                                                                                                                                                 1 (bases 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Pavco,P., and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 2132 20-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.

1 (bases 1 to 17)

1 (bases 1 to 17)

2 Acco.pt., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.

Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor

Patent: US 6566127-A 6919 20-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                           Score 12; DB 1; Length 17; 
Pred. No. 4.3e+02; 
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 12; DB 1; Le
100.0%; Pred. No. 4.3e+02;
ative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 6920 from patent US 6566127. AR329518 AR329518.1 GI:33715776
                                                                               Sequence 2132 from patent US 6566127. AR324730
                                                                                                                                                                                                                                                                                                   4.1%; Scor.
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 6919 from patent US 6566127. AR329517
                                                                                                                                                                                                                                                                       /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unknown"
                                                                                                                      AR324730.1 GI:33710538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR329517.1 GI:33715325
GAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                              GAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            800 GAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGCTCTCCTCC 13
                                                                                                                                                                                                                                                              1. .17
              GAGCTCTCCTCC
                                                                                                                                                                        Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                                                                    12;
                                                                                                                                                                                                                                                                                                                                                              800
800
                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                         Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 436
                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                  KEYWORDS
SOURCE
                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                       AR329517
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR329518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                      AR324730
                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                   LOCUS
à
                   Dp
                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                   q
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 17)
Galvin,M., Miller,A., Penny,L. and Riedy,M.
Genotyping the human UDP-glucuronosyltransferase 2B7 (UGT2B7) gene
Patent: US 6586175-A 19 01-JUJU-2003;
Location/Qualifiers
1 (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J. Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 6920 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclaimed to 17)

1 (bases 1 to 17)

Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.

Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127, A 691, 20-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                   ٠,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                         Score 12; DB 1; Length 17; Pred. No. 4.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 4.3e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 4.3e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                     bp RNA
6566127.
                                                                                                                                                                                            4.1%; Scc. 100.0%; Pred. No. 3...
                                                                                                                         1. .17
/organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 from patent US 6586175.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 6921 from patent US
AR329519
AR329519.1 GI:33715327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR349398.1 GI:33750191
                                                                                                                                                                                                    Query Match
Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                                                                                                                                                          811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           800 GAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                               3 GAGCTCTCCTCC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          958 GCCAAATTGACT 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GAGCTCTCCTCC 12
```

0

Gaps

```
PAT 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 26-OCT-2001
                                                                                                                      Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk l) enzyme
Patent: WO 0157206-A 1060 09-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Fattaey, Ali R. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonuclectides
Patent: WO 0173002-A 883 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                      Query Match
4.1%; Score 12; DB 1; Length 17;
Best Local Similarity 100.0%; Pred. No. 4.3e+02;
Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 12; DB 1; Le
ilarity 100.0%; Pred. No. 4.3e+02;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                              /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX263493 17 bp 1
Sequence 884 from Patent WO0173002.
AX263493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX263492 17 bp 1
Sequence 883 from Patent WO0173002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
AX227688
AX227688.1 GI:15556829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AXŽ63492
AXZ63492.1 GI:16512291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX263493.1 GI:16512292
                                                  synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                               801 AGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            877 TICCIGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14 TTCCTGAGATGC 3
                                                                                                                                                                                                                                     1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                           16 AGCTCTCCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 442
AX263492/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
 ACCESSION
                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX263493
                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 10-SEP-2001
                                                                                        PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blatt,L., Mcswiggen,J. and Chowrira,B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 2006 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                    Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression Patent: Wo 0159103-A 1376 16-AUG-2001; RIBOZYME PHRAMCEUTICALE, INC. (US); Blatt, Lawrence (US); McSwiggen, James (US); Chowrira, Bharat M. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 4.3e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 4.3e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="synthetic construct"
/mol_type="unassigned RNA"
/mb_txpe="taxon:32630"
/noFe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                 /organism="synthetic construct"
|mol_type="unassigned RNA"
|db_xref="taxon:32630"
|note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RNA
                                                                                            RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 2006 from Patent W00159103.
                                                                                          AX215934 17 bp RN
Sequence 1376 from Patent WO0159103.
AX215934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX227688 17 bp R1 Sequence 1060 from Patent WO0157206.
                                                                                                                                              AX215934.1 GI:15525977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX216564.1 GI:15526625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct artificial sequences.
                                                                                                                                                                                synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            895 TTCTCAGCTTCT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 895 TICICAGCIICI 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 4.1
Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5 GCCAAATTGACT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14 TTCTCAGCTTCT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Local 12; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 441
AX227688/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                   ORGANISM
                                                                           AX215934/c
                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX216564/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                          RESULT 439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   q
     a
```

٠,

Gaps

à qq

```
ö
                                                                                                                                                                                                                                                                                              PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 4.3e+02; ive 0; Mismatches 0; Indels
                                                                                                                      Indels
                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                           Ouery Match
4.1%; Score 12; DB 1; L.
Best Local Similarity 100.0%; Pred. No. 4.3e+02;
Matches 12; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match

4.1%; Score 12; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 4.3e+02;
Matches 12; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                              DNA
     /organism="Antirrhinum majus"
/mol_type="unassigned DNA"
/db_xref="taxon:4151"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          medicines
Patent: WO 03025175-A 297 27-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent: WO 03025175-A 687 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 687 from Patent W003025175. AX729053
                                                                                                                                                                                                                                                                                            AX728663
Sequence 297 from Patent WO03025175.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                  AX728663.1 GI:30508006
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX729053.1 GI:30508396
                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
Homo sapiens
                                                                                                                                                        970 CICTAAAICIGG 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 4.1.
Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         830 TCTCTTTTCTTC 841
                                                                                                                                                                                             5 CTCTAAATCTGG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 TCTCTTTTCTTC 14
                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             medicines
                                                                                                                                                                                                                                                                                           AX728663
                                                                                                                                                                                                                                                                                                                                  AX728663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX729053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                         446
                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                         AX728663
                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX729053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                    PAT 02-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 02-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamiids; Lamiales; Antirrhinaceae; Antirrhineae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antirrhinum majus (snapdragon)
Antirrhinum majus
Antirrhinum majus
Bukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
asterids; lamiids; Lamiales; Antirrhinaceae; Antirrhineae;
Antirrhinum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kmiec,B.B., Gamper,H.B., Rice,M.C. and Kim,J.
Targeted chrcmosomal genomic alterations in plants using modified
single stranded oligonucleotides
Patent: WO 0192512-A 52 06-DEC-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kmiec, B. B., Gamper, H. B., Rice, M.C. and Kim, J.
Targeted chromosomal genomic alterations in plants using modified
single stranded oligonucleotides
Patent: WO 0192512-A 324 06-DEC-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                    4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 4.3e+02; Live 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 12; DB 1; Le
100.0%; Pred. No. 4.3e+02;
ative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1..17
/organism="Antirrhinum majus"
/mol_type="unassigned DNA"
/db_xref="taxon:4151"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
             Patent: WO 0173002-A 884 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                       1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                AX324385 17 bp 17 bp Sequence 523 from Patent WO0192512.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 bp
Sequence 524 from Patent WO0192512.
AX324386
AX324386.1 GI:18095138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antirrhinum majus (snapdragon)
Antirrhinum majus
stranded oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                     AX324385.1 GI:18095137
                                                                                                                                                                                                                                             877 TICCIGAGAIGC 888
                                                                                                                                                                                                       12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              970 CTCTAAATCTGG 981
                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13 CTCTAAATCTGG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antirrhinum
                                                                                                                                                                    Query Match
                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                        RESULT 444
AX324385/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 445
             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX324386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
```

ð d

à

```
BD200627.1 GI:33010397 JP 2002509721-A/3653. Homo sapiens (human) Homo sapiens
                                                                         BD200626.1 GI:33010396
JP 2002509721-A/3652.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  %.1.
Best Local Similarity 100.0
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       954 AAGAGCCAAATT 965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 AAGAGCCAAATT 6
                                                             BD200626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ပ္ပ
                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 451
BD200627/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                          SOURCE
ORGANISM
BD200626/c
                            DEFINITION
                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 08-MAY-2003
                                                                                                                             PAT 08-MAY-2003
                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments Patent: WO 03025177-A 507 27-MAR-2003;
                                                                                                                                                                                                                                                                                     Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 4.3c+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 4.1%; Score 12; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 4.3e+02; Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                     Patent: WO 03025175-A 3446 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                           AX731812 17 bp DNA Sequence 3446 from Patent WO03025175. AX731812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 bp DN Sequence 507 from Patent WO03025177. AX734917 GI:30514194
                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                            AX731812.1 GI:30511155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               896 TCTCAGCTICTG 907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   868 TGGAACACTITIC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
Matches 12; Conservative
                  868 TGGAACACTITC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTCAGCTTCTG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGAACACTTTC 16
                                                  5 TGGAACACTITC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                         medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                          DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                          Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                            ORGANISM
                                                                                                RESULT 448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX734917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                AX731812
                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
```

à В RESULT 450

g ð

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 17)
1 (bases 1 to 17)
1 (bases 1 to 17)
1 (bases 2 to 17)
2 Pavcop.P.A.; Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J. A.
Method and reagent for treating diseases or conditions concerning
molecule participating in vasculogenic response
Detect: JP 2002509721-A 3653 02-APR-2002;
RIBOZYME PHARMACEUTICALS INC
OS Homo sapiens (human)
PN JP 2002509721-A/3653
PD 02-APR-2002
PP 24-MAR-1999 UP 2000541291
PR 27-MAR-1999 US 60/079678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Method and reagent for treating diseases or conditions concerning molecule participating in Vasculogenic response.
BD200626

17 bp RNA linear PAT 17-JUL-2003
Method and reagent for treating diseases or conditions concerning
molecule participating in vasculogenic response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A61P29/00,
PC A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
1P 2002509721-A/3652
02-APR-2002
24-MAR-1999 JP 2000541291
27-MAR-1999 US 60/079678
PAMELA A PAUCO.ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, JAMES A MCSWIGGEN
                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
1 (Dases 1 to 1).
Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A. Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.
RIBOZYME PHARMACEUTICALS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PC
C12N15/09,A61K31/7088,A61K31/7125,A61K48/00,A61P3/10,A61P17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Method and reagent for treating diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 12; DB 1; Length 17;
100.0%; Pred. No. 4.3e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  concerning molecule participating in vasculogenic response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .17
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
```

ó

Gaps

·,

PAT 31-AUG-2000

```
PAT 13-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
Unclassified.
1 (bases 1 to 18)
Draper,K.G., Pavco,P., McSwiggen,J., Gustofson,J. and Stinchcomb,D.T.
                                                                                                                                                                                  Query Match
4.1%; Score 12; DB 1; Length 18;
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 12; DB 1; Length 18; 100.0%; Pred. No. 4.6e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 12; DB 1; Length 18;
100.0%; Pred. No. 4.6e+02;
Live 0; Mismatches 0; Indels
            Brysch, W. and Schlingensiepen, K.
AN ANTISENSE OLIGONUCLECTIDE PREPARATION METHOD
Patent: WO 9833904-A 850 06-AUG-1998;
BIOGNOSTIK GES (DE): BRYSCH WOLFGANG (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense modulation of RhoB expression
Patent: US 5962672-A 22 05-OCT-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1060 from patent US 5612215.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stromelysin targeted ribozymes
Patent: US 5612215-A 1060 18-MAR-1997;
Location/Qualifiers
                                                                                                                                     /mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                              Sequence 22 from patent US 5962672. AR078596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
                                                                                                      1. .18
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                 AR078596.1 GI:10005342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        I38047.1 GI:2086037
                                                                                                                                                                                                                                                         920 CATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
1 (bases 1 to 18)
Coswert, L.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 100."
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                703 TCCAGCGAGTCC 714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.0
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        974 AAATCTGGTGTA 985
                                                                                                                                                                                                                                                                                       12 CATCACCACCAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7 rccaccacrcc 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
          AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                              RESULT 454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 455
138047/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                              AR078596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                       Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             쉱
                                                                                   A61P35/00, A61P43/00, C12NS/10, C12N9/00//A61K35/76, C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                            ö
 PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, JAMES A MCSWIGGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 06-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Brysch, W.
A PHARMACEUTICAL COMPOSITION COMPRISING ANTISENSE-NUCLEIC ACID FOR PERVENTION AND/OR TREATMENT OF NEURONAL INJURY, DEGENERATION AND CELL DEATH AND FOR THE TREATMENT OF NEOPLASMS
PATENT: WO 9552051-A 26 19-JAN 1995;
PATENT: MO 9552051-A 26 19-JAN 1995;
PATENT: GES FURE BIOMOLEKUL (DE)
Other publication AU 745694 950206.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 22-JAN-2000
PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHO PI JAMES A MCSWIGGEN PC C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 18)
Schlingensiepen, G., Schlingensiepen, R., Schlingensiepen, K. and
                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                   Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response Rey Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                           .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·
0
                                                                                                                                                                                                          /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                        Length 17;
                                                                                                                                                                                                                                                                                                                               Query Match 4.1%; Score 12; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 4.3e+02; Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 4.1%; Score 12; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 4.6e+02; Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 850 from Patent W09833904.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 bp
A4210
A42510.1 GI:2297959
                                                                                                                                                                                                                                            1. .17
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A88702.1 GI:6737272
                                                                                                                                                                                                                                                                                                                                                                                                    954 AAGAGCCAAATT 965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             920 CATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGAGCCAAATT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (bases 1 to 18)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12 CATCACCACCAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unidentified
unidentified
unclassified.
                                                                                                                                                                                             source
                                                                      A61P29/00,
PC A61P35
                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                    16
                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 453
A88702/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 452
A42510/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                    δλ
```

0

Gaps

·;

·,

Gaps

. 0

```
1 Similarity
12; Conserv
                                                                                              variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD066215/c
                                                                                                                                                                                                                                                    RESULT 459
AX708561
                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
     JOURNAL
                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                               FEATURES
                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                               Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 26-SEP-2001
                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 25-SEP-2002
                                                          PAT 01-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bellenson, J., Smith, D., Lancet, D., Glusman, G., Fuchs, T. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 18)
Roberts,M.L. and Cowsert,L.M.
Antisense modulation of human Rho family gene expression
Patent: US 6410323-A 83_25-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                 Draper, K.G., Pavco, P., McSwiggen, J., Gustofson, J. and Stinchcomb, D.T.
Method of reducing stromelysin RNA via ribozymes
Patent: Use 5731295-A 1060 24-MAR-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                            Query Match 4.1%; Score 12; DB 1; Length 18; Best Local Similarity 100.0%; Pred. No. 4.6e+02; Matches 12; Conservative 0; Mismatches 0; Indels
                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                       Sequence 1060 from patent US 5731295.
194897
                                                                                                                                                                                                                                                                                                                                                                                                                                       AR215535 18 bp I Sequence 83 from patent US 6410323. AR215535 AR215535.1 GI:23313791
                                                                                                                                                                                                                                               1. .18
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 83 from Patent WO0127158. AX241335 AX241335.1 GI:15798210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.
                                                                                                     I94897.1 GI:3939367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                703 TCCAGCGAGTCC 714
                                                                                                                                                                                                                                                                                                                                                   974 AAATCTGGTGTA 985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7 TCCAGCGAGTCC 18
                                                                                                                                                                                                                                                                                                                                                                 12 AATCTGGTGTA 1
12 AAATCTGGTGTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
Unclassified.
                                                                                                                                                       Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX241335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Yanai, I
                                                                                                                               Unknown.
                                                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                       RESULT 456
194897/c
                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                          TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX241335
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
                                                                           DEFINITION
                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                     REFERENCE
                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                AR215535
                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                      δ
 셤
```

```
PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 04-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
Olfactory receptor sequences
Patent: Wo 0127158-A 83 19-APR-2001;
Digiscents (US) : YEDA RESEARCH AND DEVELOPMENT COMPANY, LTD. (IL)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Luclassified.

Losses 1 (bases 1 to 18)

AUTHORS Schlingensiepen, K.H. and Brysch, W.

TITLE An antisense oligonucleotide preparation method

OURNAL Patent: JP 2001511000-A 850 07-AUG-2001;

BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH

SNT OS UNKnown

PN JP 2001511000-A/850

PD 07-AUG-2001

PP 30-JAN-1999 JP 1998532533

PR 31-JAN-1997 EP 07-1998

PC 07-100-1997 PP 07-1998

PC 07-100-1997

PC 07-100-1998

PC 07-100-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Method for specific, fast detection of threadlike bacteria
Patent: WO 02101089-A 12 19-DEC-2002;
Vermicon AG (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

4.1%; Score 12; DB 1; Length 18;
Best Local Similarity 80.0%; Pred. No. 4.6e+02;
Matches 12; Conservative 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD066215
An antisense oligonucleotide preparation method.
BD066215
BD066215
BD066211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 12; DB 1; Le
100.0%; Pred. No. 4.6e+02;
:ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1..18
/ Organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noTe="0ligonukleotid"
                                                                                                                                                                   1..18
/organism="synthetic construct"
/ml_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX708561 18 bp | Sequence 12 from Patent WO02101089.
AX708561
                                                                                                                                                                                                                                                                                                                                                                        note="y = t/u or c"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Snaidr, J. and Beimfohr, C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX708561.1 GI:29564328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        885 ATGCACTTACTTCTC 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 ATGTAYTINCTICIC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       765 GCCTCCACTICT 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCTCCACTICT 16
```

PAT 16-NOV-1993

linear

DNA

```
synthetic construct
artificial sequences.
1 (bases 1 to 15)
Ueda,I., Niwa,M., Saito,Y., Sato,S., Ono,H. and Kitaguchi,T.
59 Valine insulin-like growth factor I and process for production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 15)
Ueda,I., Niwa,M., Satoh,S., Saitoh,Y. and Kusunoki,C.
Process for production of isulin-like growth factor I and plasmid for production thereof Patent: BP 0219814-A 59 29-APR-1987;
FUJISAWA PHARMACEUTICAL CO., LTD
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match

4.1%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 4.1e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                     1. .15
/organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.1e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                      Patent: EP 0158892-A 85 23-0CT-1985;
FUJISAWA PHARMACEUTICAL CO., LTD
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15 bp I
Sequence 323 from Patent WO9833904.
A88175
                                                                                                                                         15 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A35109
Synthetic IGF-I gene oligo.
                            951 AAGAAGAGCCAAATT 965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        951 AAGAAGAGCCAAATT 965
                                                           1 ATGCAGAGCCAAATT 15
                                                                                                                                                 oligonucleotide 'd2'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ATGCAGAGCCAAATT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         951 AAGAAGAGCCAAATT 965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A35109
A35109.1 GI:1926768
                                                                                                                                                                                                              synthetic construct
                                                                                                                                                                                 A11589.1 GI:491131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 ATGCAGAGCCAAATT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                          thereof
                                                                                                                                      A11589
                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                             ORGANISM
                                                                                                      RESULT 463
All589
                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 465
                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A35109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A88175
                                                      g
                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                PAT 09-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 02-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                         Gaps
         Кеу
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 15)
Ueda,I., Niwa,M., Saito,Y., Sato,S., Ono,H. and Kitaguchi,T.
Process for production of gamma-interferon
Parent: EP 0176916-A 26 09-APR-1986;
FUJISAWA PHARMACEUTICAL CO., LTD
An antisense oligonucleotide preparation method FH Location/Qualifiers
                                                                                                                                                                                           .,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                           Trifficial sequences.

1 (bases 1 to 15)
Ueda,I., Niwa,M., Saltch,Y., Satch,S. and Yamada,H.
Process for production of somatostatin
Patent: EP 0197558-A 44 15-OCT-1986;
FUJISAWA PHARMACEUTICAL CO., LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ch 4.1%; Score 11.8; DB 1; Length 15; I Similarity 86.7%; Pred. No. 4.1e+02; 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                           Length 18;
                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Indels
                                                                                                                                                      4.1%; Score 12; DB 1; Le
100.0%; Pred. No. 4.6e+02;
tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.1e+02;
ive 0; Mismatches 2;
                                              /organism='Unknown'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .15
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                           1. .18
/organism="unidentified"
                                                                                                         /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                             15 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15 bp
                                 .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                  Oligonucleotide (d2). A09438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                951 AAGAAGAGCCAAATT 965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide (D2).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 ATGCAGAGCCAAATT 15
                                                                                                                                                                                                                                                                                                                                                                   A09438.1 GI:490543
                                                                                                                                                                                                                                                                                                                                                                                                synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A10641
A10641.1 GI:490769
                                                                                                                                                                                                              920 CATCACCACCAC 931
                                                                                                                                                                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 86.77
Matches 13; Conservative
                                                                                                                                                                                                                                      12 CATCACCACCAC 1
                                                                                                                                                Query Match
Best Local Similarity
                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                          A09438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A10641
ပ္ပ
                            FT
                                                                           source
                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                        RESULT 461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 462
A10641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                      A09438
                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
```

0,

Gaps

0

PAT 06-DEC-1996

linear

DNA

0

Gaps

0;

Indels

PAT 23-JAN-2000

linear

DNA

0;

Gaps

0

Indels

Length 15;

PAT 29-SEP-1999

linear

```
(bases 1 to 15)
Grimm, S., Stinchcomb, D.T., McSwiggen, J., Sullivan, S. and
                                                                                                                                                                                                                                                                                                                   Unknown.
Unclassified.
1 (bases 1 to 15)
Grimm,S., Stinchcomb,D.T., McSwiggen,J., Sullivan,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Drammir...
Intercellular adhesion molecule-1 (ICAM-1) ribozymes
Intercellular 3837542-A 147 17-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 86.7%; Pred. No. 4.18+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                         Draper, K.G.
Intercellular adhesion molecule-1 (ICAM-1) ribozymes
Patent: US 5837542-A 146 17-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

4.1%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 4.1e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                             ch 4.1%; Score 11.8; DB 1; 1 Similarity 86.7%; Pred. No. 4.1e+02; 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15 bp D1 Sequence 147 from patent US 5837542. AR055943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                  AR055942
Sequence 146 from patent US 5837542.
AR055942
                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .15
/organism="unknown"
/wol_type="unassigned DNA"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR055943.1 GI:5981520
                                                                                                                                                                                                                                                                    AR055942.1 GI:5981519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              913 AGATTATCATCACCA 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 910 ATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AGATTGTCATCATCA 15
                                                                                                              CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 Argadarigrcarca 15
                                                                                                                                           1 ccrccrcrrcadade 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
Unclassified.
                                                                Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR113700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                  994
                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 470
AR113700
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 469
AR055943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
FEATURES
                                                                                                                                                                                          RESULT 468
AR055942
                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                             q
                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 4.1e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                          Query Match

4.1%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 4.1e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unclassified.

1 (bases 1 to 15)
Bryson, W.D. and Schlingensiepen, K.D.
An antisense oligonucleotide preparation method
Patent: EP 0856579-A 323 05-AUG-1998;
BIOGNOSTIK USE (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unidentified
unclassified.
1 (bases 1 to 15)
Brysch, W. and Schlingensiepen, K.
AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
PATENT WO 8333904-A 1663 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
                                           unidentified
unidentified
unclassified.
1 (bases 1 to 15)
Brysch, W. and Schlingensiepen, K.
AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
Patent: WO 9833904-A 323 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                             15 bp D. Sequence 1663 from Patent WO9833904. A89515. GI:6738085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15 bp 1
Sequence 323 from Patent EP0856579,
A90142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .15
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

    .15
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           766 CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                                                                                                           766 CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A90142.1 GI:6738656
                                                                                                                                                                                                                                                                                                                                                        cerceretreadade 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTCTGCTTCTGAGG 1
                A88175.1 GI:6736745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                           JOURNAL
                   VERSION
KEYWORDS
SOURCE
                                                                                              REFERENCE
                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                        A89515/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A90142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                      rocus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
```

. 0

Gaps

·: 0

PAT 29-SEP-1999

0

Gaps

ö

PAT 16-MAY-2001

linear

```
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161731 15 bp D1
Seguence 285 from patent US 5658780.
161731
                                                                                                                                                                                                                                                         AR133225.1 GI:14122130
                                                                                                              900 AGCITCTGCGAICAG 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900 AGCTTCTGCGATCAG 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       798 AAGAGCTCTCCTCCA 812
                                                                                                                                          15 AGCATCTGAGATCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AAGACTTCTCCTCCA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15 AGCATCTGAGATCAG 1
                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                  RESULT 473
AR133225/c
                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 474
I61542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 16-MAY-2001
                                                                                                                           Draper, K.G.
Ribozyme treatment of diseases or conditions related to levels of intercellular adhesion molecule-1 (ICAM-1)
Patent: US 6132967-A 146 17-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ribozyme treatment of diseases or conditions related to levels of intercellular adhesion molecule-1 (ICAM-1)
Patent: US 6132967-A 147 17-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                               Gaps
                                                                                                  1 (bases 1 to 15)
Grimm, S., Stinchcomb, D.T., McSwiggen, J., Sullivan, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 15)
Grimm, S., Stinchcomb, D.T., McSwiggen, J., Sullivan, S. and
                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·,
                                                                                                                                                                                                                                                         Query Match 4.1%; Score 11.8; DB 1; Length 15; Best Local Similarity 86.7%; Pred. No. 4.1e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 4.1e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Muknown.

Unknown.

Unclassified.

S 1 (bases 1 to 15)

S Stinchcomb, D.T., Jarvis, T. and McSwiggen, J.

Nucleic acid based inhibition of CD40

AL Patent: US 6194150-A 1649 27-FEB-2001;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       bp DNA
6194150.
Sequence 146 from patent US 6132967.
AR113700
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 147 from patent US 6132967.
                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                      1. .15
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR133224 15
Sequence 1649 from patent US
                             AR113700.1 GI:14094022
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR113701.1 GI:14094023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR133224
AR133224.1 GI:14122129
                                                                                                                                                                                                                                                                                                                   910 ATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                              1 Argadarrercarca 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   913 AGATTATCATCACCA 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AGATTGTCATCATCA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 86.74
Matches 13, Conservative
                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Draper, K.G.
                                                        Unknown.
                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown
                                                                                                                                                                                                      source
 DEFINITION
                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
              ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 472
AR133224/c
                                                                                                                                                                                                                                                                                                                                                                                       RESULT 471
                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                  REFERENCE
                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                       FEATURES
                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                     AR113701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
```

```
·;
                                                                                                                                                                                                                                   PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 07-0CT-1997
                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·,
            Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
4.1%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 4.1e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
4.1%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 4.1e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                 M Unknown.

W Unknown.

Unclassified.

E 1 (bases 1 to 15)

(S Stinchcomb.D.T., Jarvis,T. and McSwiggen,J.

Nucleic acid based inhibition of CD40

AL Patent: US 6194150-A 1650 27-FEB-2001;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.

1 (bases 1 to 15)
Stinchomb, D.T., Draper, K.G. and McSwiggen, J.
Stinchomb, D.T., Draper, K.G. and McSwiggen, J.
Batent: US 5658780-A 96 19-AUG-1997;
Location/Qualifiers
Query Match

4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 4.1e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                      Sequence 1650 from patent US 6194150.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161542
Sequence 96 from patent US 5658780.
1161542.1 GI:2479490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
/mol_type="unassigned DNA"
```

```
Patent: BP 1260586-A 3175 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                 unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                      Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Woolf, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Woolf, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       genes
                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 479
                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                            RESULT 478
                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                          AX632965
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX636036
      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                g
                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Woolf, \mathbf{T}. Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 21-FEB-2003
                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                      PAT 26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpelsky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tuijnder, M., Telerman, A., Amson, R. and Susini, L. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 4.1e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                        Length 15;
                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                      Indels
                                  M Unknown.
Unclassified.
3 1 (bases 1 to 15)
S Stinnbcomb, D.T., Draper, K.G. and McSwiggen, J.
Rel a targeted ribozymes
AL Patent: US 5658780-A 285 19-AUG-1997;
Location/Qualifiers
                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; 86.7%; Pred. No. 4.1e+02; ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA
                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent: WO 02059256-A 1762 01-AUG-2002;
MOLECULAR ENGINES LAB (FR)
                                                                                                                                                                                                                                                                                                                                                                    15 bp DN Sequence 1762 from Patent WO02059256. AX495997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX632963 15 bp R
Sequence 102 from Patent EP1260586.
AX632963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                          /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .15
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX632963.1 GI:28468577
                                                                                                                                                                                                                                                                                                                                                                                                                     AX495997.1 GI:23341607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         867 TIGGAACACTITCCT 881
                                                                                                                                                                                                                                                                    798 AAGAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 friedala artriricer 15
                                                                                                                                                                                                                                                                                                 1 AAGACTTCTCTCCA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
GI:2479679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13; Conservative
                                                                                                                                                                                                           Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                medicines
161731.1
                          Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sonrce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 477
                                                                                                                                                                                                                                                                                                                                                RESULT 476
                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                            ORGANISM
                                                                                                     TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX632963
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                        REFERENCE
                                                                                        AUTHORS
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                 AX495997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                    g
```

```
Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·.
                                                                                                                                                                                                                                       ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Direnzo,A., Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J., Mcswiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M., Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Swedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 4.1e+02; vative 0; Mismatches 2; Indels
                                                                                                                                                                                          Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                       ch 4.1%; Score 11.9; DB 1; Similarity 86.7%; Pred. No. 4.1e+02; 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent: EP 1260586-A 104 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX636036 15 bp RN
Sequence 3175 from Patent EP1260586.
AX636036
Patent: EP 1260586-A 102 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX632965 15 bp 1
Sequence 104 from Patent BP1260586.
AX632965 AX632965.1 GI:28468579
                                                                                                                 /mol_type="unassigned_RNA"
/db_xref="taxon:32644"
                                                                           1. .15
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX636036.1 GI:28471650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            913 AGATTATCATCACCA 927
                                                                                                                                                                                                                                                                                            910 ATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AGATTGTCATCATCA 15
                                                                                                                                                                                                                                                                                                                                    1 Argadarrercarca 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
```

δ

```
unclassified.
1 (bases 1 to 15)
Schlingensiepen, K.H. and Brysch, W.
         Strandedness: Single;
Topology: Linear;
                                                                                                                                                                                                                                                                                                                        BD065688
BD065688.1 GI:22611291
JP 2001511000-A/323.
unidentified
                                                                                                                                                                                                       922 TCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                766 CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                1 reaccaccercerce 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 ccrccrcrrcagage 15
                                                                                                                                                                             13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 86.7.
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                             unidentified unclassified.
                                                                                                                                                    Query Match
Best Local Similarity
Matches 13; Conserv
                                                   source
                                    Key
                                                                                                                                                                                                                                                                                                  BD065688
          SSEEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FF
                                                                                        source
                                                                                                                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 483
BD067028/c
                                                                                                                                                                                                                                                                      RESULT 48
BD065688
                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Locus
                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                              ·.
                                                                                                                                                                                                                              PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                           Woolf, 	exttt{T.}
Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 31-JAN-2002
                                                                                                                                                                                                                                                                                                                                       Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.W., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1156/96 PR
                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HENRIK STENDER, KAARE LUND, TINA ANDRESEN MOLLERUP PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                             4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 4.1e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 4.1e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel probes for the detection of Mycobacteria. BD005795
                                                                                                                                                                                                                                                                                                                                                                                                                               Patent: EP 1260586-A 3364 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                      Sequence 3364 from Patent EP1260586.
AX636225
AX636225.1 GI:28471839

    .15
/organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unidentified"
  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD005795.1 GI:18634166
JP 2001501825-A/6.
                                                                                                                               798 AAGAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         798 AAGAGCTCTCCTCCA 812
                                                                                                                                                        1 AAGACTTCTCCTCCA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 86.79,
---hes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AAGACTICTCCTCCA 15
                                                                   Query Match
Best Local Similarity 86.78
Matches 13; Conservative
                                                                                                                                                                                                                                                                                      unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unidentified
              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                            RESULT 480
AX636225
                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 481
BD005795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                        AUTHORS
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                      LOCUS
```

à

```
o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 27-AUG-2002
                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      E 1 (Dassel 10. 15)
S Chlingensiepen, K.H. and Brysch, W.
An antisense oligonucleotide preparation method
L Patent: 4D 2001511000-A 323 07-AUG-2001,
BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
OS UNKNOWN
PN 4D 2001511000-A/323
PN 31-AUG-2001
PF 30-JAN-1998 JP 1998532533
PR 31-JAN-1998 JP 1998532533
PR 31-JAN-1997 EP 97101531.8
PI KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
PC C12X15/11, COTR21/04, A61X21/70
CC An antisense oligonucleotide preparation method FH Key
                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-AUG-2001

30-JAN-1998 JP 1998532533

31-JAN-1997 EP 97101531.8

KARL HEMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH

C12N15/11, C07H21/04, AG1K31/70

An antisense oligonucleotide preparation method FH

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ó
                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 15;
86.7%; Pred. No. 4.1e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 4.1e+02; iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             An antisense oligonucleotide preparation method. BD067028. BD067028.1 GI:22612631 UP 2001511000-A/1663. unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD065688 15 bp DNA linea An antisense oligonucleotide preparation method.
                       ce 1. .15
/organism='Unidentified'.
Location/Qualifiers
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism='Unknown'.
Location/Qualifiers
                                                                                      1. .15
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .15
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .15
```

ö

TITLE JOURNAL

COMMENT

source

FEATURES

```
PAT 30-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 14-FEB-2001
                                                                                                                                                  PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.

1 (Dasses 1 to 16)
Goodearl,A.D.J. and Glucksmann,M.Alexandra.
Goodearl,A.D.J. and Glucksmann,M.Alexandra.
the muscarinic family of receptors
Patent: US 6093545-A. 26, 25-JUL-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·.
 ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 4.4e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                        linear
 Indels
                                                                                                                                                                                                                                                                                           Stein, H., Durkop, H. and Latza, U.
Stein, H., Durkop, H. and Latza, U.
Nucleic acids encoding lymphoid CD30 antigen
Patent: US 5866372-A 5 02-FEB-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 86.7%; Pred. No. 4.4e+02;
Matches 13; Conservative 0; Mismatches 2;
 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR104210 16 bp 1
Sequence 26 from patent US 6093545.
AR104210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .16
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                              11. .16
/organism="unknown"
/mol_type="unassigned DNA"
   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 bp
Sequence 4 from Patent W00123571.
AX105633.1 GI:13921662
                                                                                                                                                  Sequence 5 from patent US 5866372. AR031533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR104210.1 GI:12816918
   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             775 CTGAGGGCAGCCCT 789
                                                                                                                                                                                                        AR031533.1 GI:5945822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781 GCAGCCCTCTGGTG 795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 CTGAGGCCAGGCCCT 15
                                     717 GGAGAGTGACTCTGG 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15 dchdecccrccddrd 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 86.7
Matches 13; Conservative
     Conservative
                                                                     15 GGAGAGTAACTATGG
                                                                                                                                                                                                                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                Unknown
       13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 487
AX105633/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 486
                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                           AR031533/c
                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
        Matches
                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR104210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                           RESULT
                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                          à
                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lacture 1 (bases 1 to 15)

Blatt, L., Mcswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.

Blatt, L., Mcswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.

Braymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection

L. Patent: JP 2002512791-A 2605 08-MAY-2002;

RIBOZYME PHARMACEUTICALS INC

OS Hepatitis virus (hepatitis C virus)

PN JP 2002512791-A/2605

PP 26-APR-1999 UP 2005545991

PR 27-APR-1999 US 60/083217, 18-SEP-1998 US 60/100842 PR

25-FEB-1999 US 09/257608, 23-MAR-1999 US 09/274553 PI

IAMRENCE BLAIT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD209015 17-JUL-2003 Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
A61K37/66,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ή
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism='Hepatitis virus (hepatitis C
                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                 Key
An antisense oligonucleotide preparation method
EloGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
ON UNROWN
PN JP 2001511000-A/1663
PP JD-JAN-1998 JP 1998532533
PR 30-JAN-1998 JP 1998532533
PR 31-JAN-1997 EP 97101513.8
PR KARL HERMANN SCHLINDENSIEPEN, WOLFGANG BRYSCH
PC CL2N15/11, C07H21/04, A61K31/70
CC An antisense oligonucleotide preparation method FH Key
                                                                      JP 2001211000-A/1663
07-AUG-2001
30-JAN-1999 JP 1998532533
31-JAN-1997 EP 97101531.8
KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
C12N1S/11,C07H21/04, AGIK31/70
An antisense oligonucleotide preparation method FH
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 15;
                                                                                                                                                                                                                                                                                                                                                   Length 15;
                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 11.8; DB 1;
Pred. No. 4.1e+02;
                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; ilarity 86.7%; Pred. No. 4.1e+02; Conservative 0; Migmorals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
1. .15
                                                                                                                                                                                                                                    organism='Unknown'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .15
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"

    .15
    /organism="unidentified"
    /mol_type="genomic DNA"
    /db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                    .15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BD209015
BD209015.1 GI:33018785
JP 2002512791-A/2605.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         virus)'
                                                                                                                                                                                                                                                                                                                                                                                                                          766 CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                        15 ccrcrccrrcrcAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            답답답당
                                                                                                                                                                                                                                                                                                                                                          Query Match
```

DEFINITION

ACCESSION

VERSION KEYWORDS SOURCE

BD209015/c RESULT 484

S 임 ORGANISM

JOURNAL

COMMENT

AUTHORS

TITLE

REFERENCE

ö

0

source

FEATURES

organism="synthetic construct"

```
AJ588077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            526D06
                                                                                     Query Match
                                                                                                                   Matches
                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 491
AJ588077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                        RESULT 49
BD086294
                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                         Isom,L.L., Kazen-Gillespie,K. and Rogers,K.E.
Methods and compositions relating to sodium channel betala subunits
Patent: WO 0123571-A 4 05-APR-2001;
THE REGENTS OF THE UNIVERSITY OF MICHIGAN (US); Ortho-McNeil
                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                        PAT 30-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 27-JAN-2003
                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   D^{\prime} Andrea, M . and Rogers, K.E. Methods and compositions relating to sodium channel beta-la
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Soldatenkov, V. A., Jung, M., Smulson, M. and Dritschilo, A. Gene therapy prostate cancer: sensitization of cells to dna danaging drugs and radiation danaging drugs and radiation Patent: WO 0248344-A 1 20-JUN-2002; GEORGETOWN UNIVERSITY (US)

Location/Qualifiers
1. .16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1..16
/organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
/note="RT-PCT primer sequence unique to Beta 1A"
                                                                                                                                                                                                                                                   .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                               /mol_type="unassigned DNA"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noTe="RT-PCR primer sequence unique to blA"
                                                                                                                                                                                                               Score 11.8; DB 1; Length 16;
Pred. No. 4.4e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 4.4e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                        1. 16
/organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent: WO 0123570-A 4 05-AFR-2001;
Ortho-McNeil Pharmaceutical, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                   AX111731 16 bp
Sequence 4 from Patent WO0123570.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1 from Patent W00248344. AX592298
                                                                                     Pharmaceutical, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                           AX111731.1 GI:13927981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX592298.1 GI:27950407
                                                                                                                                                                                                                4.1%;
86.7%;
                                                                                                                                                                                                                                                                      820 GTTGGCTGTGTCTCT 834
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               820 GTTGGCTGTGTCTCT 834
                                                                                                                                                                                                                                                                                                      ścirściercicie 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 dcirdcididicici 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                synthetic construct
synthetic construct
                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 86.7;
Matches 13; Conservative
                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   subunits
                                                                                                                                                                                                                                                                                                                                                                             AX111731
                                                                                                                                                                                                                                                                                                      16
                                                                                                                                                                                                             Query Match
                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                              AX111731/c
LOCUS
                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                  RESULT 488
                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
              REFERENCE
                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX592298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITIE
                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AJS88077 16 bp DNA linear PLN 23-OCT-2003
Arabidopsis thaliana T-DNA flanking sequence, left border, clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  left border; T-DNA flanking sequence.
Arabidopsis thaliana (thale cress)
Arabidopsis thaliana
Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CI2NL5/09,C07K14/705,C07K16/28,C12N5/10,C12P21/02,C12Q1/68//(C12P21/02,C12R1:91),C12N15/00,C12N5/00
Strandedness: Single;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           International Conference of the Conference of th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09/042780 PI
XIE, PETER PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Topology: Linear; G protein-coupled receptor and utilization thereof FH Location/Qualifiers
                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 4.4e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
4.1%; Score 11.8; DB 1; Length 16;
Best Local Similarity 86.7%; Pred. No. 4.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G protein-coupled receptor and utilization thereof. BD086294.
BD086294.1 GI:22631904
UP 2001525174-A/10.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism='Unidentified'
/mol_type="unassigned_DNA"
/db_xref="taxon:32630"
/note="Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .16
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AJ588077.1 GI:37937701
                                                                                                                                                                                                                                                                                                                                                    921 ATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                1 ATCACCATCACCATC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          775 CTGAGGGCAGCCCCT 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 creaceccadecer 15
                                                                                                                                                                                                                                                        13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unclassified.
                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
```

```
Unknown.
                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                   DEFINITION
                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                    RESULT 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR040081
LOCUS
                                                                                                       ACCESSION
                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR040083
                                                 AR039269
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                            Direct Submission

Submitted (23-OCT-2003) Balzergue S., UMRGV, INRA/CNRS, 2 rue Saston Cremieux, 91057 Evry cedex, FRANCE
Gaston Cremieux, 91057 Evry cedex, FRANCE
PCR was performed on DNA from transformants of Arabidopsis thaliana plants from INRA (versailles). The DNA fragment(s) resulting from the PCR were directly sequenced from the left or the right border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutent line and a link to a database providing a graphical display of the insertion site are available at http://dbsgap.versailles.inra.fr/publiclines/. This sequence has been generated in the framework of the French plant genomics program 'Genoplante' (http://www.genoplante.com and http://genoplante-info.infobiogen.fr).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 10-JUL-1996
Brunaud, V., Balzergue, S., Dubreucq, B., Aubourg, S., Samson, F., Chauvin, S., Bechtold, N., Cruaud, C., DeRose, R., Pelletier, G., Lepiniec, L., Caboche, M. and Lecharny, A.

T-DNA integration into the Arabidopsis genome depends on sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'clone_lib="Arabidopsis thaliana T-DNA insertion lines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequeces.
I (bases 1 to 17)
Chaudhuri, B., Meyhack, B., Heim, J. and van Oostrum, J.
Modified fibrinolytic agents
Patent: EP 0225286-A 5 10-JUN-1987;
CIBA-GEIGY AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 4.4e+02; artive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.7e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .17
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Arabidopsis thaliana"

    .16
/note="T-DNA flanking sequence
left border"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 bp DNA
Synthetic t-PA sequencing primer III.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic_DNA"
/cultivar="Wassillewskija"
/db_xref="taxon:3702"
/clone="526D06"
                                                                            of pre-insertion sites
EMBO Rep. 3 (12), 1152-1157 (2002)
22363535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      790 CIGGIGCCAAGAGCI 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              908 CGATCAGATTATCAT 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 CGATCACATTATGAT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A34325.1 GI:1568177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 credreccacerecr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13; Conservative
                                                                                                                                             2 (bases 1 to 16)
Balzergue, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                  12446565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 492
A34325/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                 PUBMED
                                                                                                                  MEDLINE
                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
            AUTHORS
                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                               TITLE
                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
```

```
PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                         ö
PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 17; ilarity 86.7%; Pred. No. 4.7e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknow...
Unclassified.
1 (bases 1 to 17)
Stinchcomb.D.T. and McSwiggen,J.A.
Interleukin-2 receptor gamma-chain ribozymes
Patent: US 5807743-A 931 15-SEP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Charles 1 to 17)
Stinchcomb, D.T. and McSwiggen, J.A.
Interleukin-2 receptor gamma-chain ribozymes
Patent: US 5807743-A 929 15-SEP-1998;
Location/Qualifiers
                                                                                                                                              1 (bases 1 to 17)
Stinchcomb,D.T. and McSwiggen,J.A.
Interleukin-2 receptor gamma-chain ribozymes
Patent: US 5807749-A 117 15-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp Dr Sequence 931 from patent US 5807743.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 bp DN
Sequence 929 from patent US 5807743.
     17 bp Di
Seguence 117 from patent US 5807743.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                    /mol_type="unassigned DNA"
                                                                                                                                                                                                                    location/Qualifiers
                                                                                                                                                                                                                                                           /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR040083.1 GI:5959446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR040081
AR040081.1 GI:5959444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  834 TTTTCTTCTCTGAAG 848
                                                             GI:5958632
                                                                                                                                                                                                                                                                                                                                                                                   835 TTTCTTCTCAAGA 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rgrrarrcrcrdaad 17
                                                                                                                                                                                                                                                                                                                                                                                                       3 TCTATTCTCTGAAGA 17
                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                  Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 13; Conserv
                                            ARO39269
ARO39269.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
```

·,

DEFINITION ACCESSION

VERSION KEYWORDS

RESULT 496

d

AR040085

LOCUS

ORGANISM

SOURCE

REFERENCE AUTHORS

source

Matches

JOURNAL

TITLE

```
1 (bases 1 to 17)
Balch, W.J. and Hogan, M.E.
Methods for fabricating an array for use in multiplexed biochemical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S Homo sapiens (human)
N JP 2002525127-A/468
D 13-AM022002
F 24-SEP-1999 UP 2000572407
R 25-SEP-1998 US 60/101757
I JOHN E LANDERS, BARBARA JORDAN, DAVID E HOUSMAN, ALAIN CHAREST PC C12N15/09, C12Q1/68, G01N33/53, G01N33/566, G01N33/58, G01N37/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Notice of the state of the second of the sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 17)

Landers, J.E., Jordan, B., Housman, D.E. and Charest, A.

Methods and products related to genotyping and DNA analysis Patent: JP 2002525127-A 468 13-AUG-2002;

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   buz41521 17-c
Methods and products related to genotyping and DNA analysis
BD241521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS BD241540 17 bp DNA linear PAT 17-J
DEFINITION Methods and products related to genotyping and DNA analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                         Patent: US 6312960-A 14 06-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="Homo sapiens"
/wol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
               AR177748
AR177748.1 GI:17920103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD241521.1 GI:33051291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    774 TCTGAGGGCAGCCCC 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 rereaddeceaacere 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JP 2002525127-A/468.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               832 TCTTTTCTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 TCTTCTCTTTGA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                              Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                 analysis
                                                                                                 Unknown.
                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             G01N37/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                      Source
                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                   JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 500
BD241540/c
                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
               ACCESSION
                                       VERSION
KEYWORDS
                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD241521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  o,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 17-DEC-2001
                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 17)
Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T. C-myb ribozymes having 2'-5'-linked adenylate residues
Patent: US 5817796-A 1713 06-0CT-1998;
                                                                                                       Query Match 4.1%; Score 11.8; DB 1; Length 17; Best Local Similarity 86.7%; Pred. No. 4.7e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ch 4.1%; Score 11.8; DB 1; Length 17; l Similarity 86.7%; Pred. No. 4.7e+02; l3; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 17)
Stinchcomb, D.T. and McSwiggen, J.A.
Interleukin-2 receptor gamma-chain ribozymes
Patent: US 5807745-A 933 15-SEP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1713 from patent US 5817796.
                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 933 from patent US 5807743. AR040085
                                                         /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ARI77748
Sequence 14 from patent US 6312960.
1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR040085.1 GI:5959448
                                                                                                                                                                                                                             834 TTTTCTTCTGAAG 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR046920.1 GI:5968385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       836 TICTICTCTGAAGAC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             725 ACTCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                       TGTTATTCTCTGAAG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 rrarrcrcrdaagcc 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCTGGTCATGTGA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
```

ö

AR177748 LOCUS DEFINITION

RESULT 498

source

JOURNAL FEATURES

DEFINITION ACCESSION

VERSION KEYWORDS

RESULT 497 AR046920

a

LOCUS

ORGANISM

SOURCE

REFERENCE AUTHORS

```
A61K37/02,
(C12N5/00,C12R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD256491.1 GI:33066261
JP 2002541795-A/4284.
unidentified
                                                                                                                                                                                                                       BD253914.1 GI:33063684 JP 2002541795-A/1707. unidentified unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    751 CCCAGGGTCCCTAGG 765
                                                                            766 CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15 cccadgaacccadd 1
                                                                                                       ccrecerrecade 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unidentified unclassified.
                                                                                                                                                                                                                                                                                 unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C12R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
FT
FT
                                                   13;
                                                                                                         16
                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD256491/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 503
                                                                                                                                                     RESULT 502
BD253914/c
                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                  Matches
                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                 ð
                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Butheria; Primates; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 17)

2 Inders, J.E., Jordan, B., Housman, D.E. and Charest, A.

Methods and products related to genotyping and DNA analysis

I. Patent: JP 200255127-A 488 13-AUG-2002;

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

OS Homo sapiens (human)

PN JP 200225127-A/488

PD 13-AUG-2002

PR 25-SEP-1999 UP 200572407

PR 25-SEP-1999 US 60/11757

PI JOHN E LANDERS, BARBARA JORDAN, DAVID E HOUSMAN, ALAIN CHAREST PC

CIZUN 5/09, CIL2Q1/68, GOIN33/586, GOIN33/586, GOIN37/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Methods and products related to genotyping and DNA analysis FH Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA linear PAT 17-JUL-2003 genotyping and DNA analysis.
                                                                                                                                                                      C12N15/00 C12N15/00 Methods and products related to genotyping and DNA analysis FH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                 Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 17)

Landers, J.E., Jordan, B., Housman, D.E. and Charest, A.
Methods and products related to genotyping and DNA analysis Patent: JP 200252127-A 487 13-AUG-2002;

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                    /organism='Homo sapiens (human)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/nol_type="genomic DNA"

    .17
    /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp
Methods and products related to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD241541
BD241541.1 GI:33051311
JP 2002525127-A/488.
Homo sapiens (human)
BD241540
BD241540.1 GI:33051310
JP 2002525127-A/487.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                766 CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 cerecerreceade 2
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ouery Match
Best Local Similarity 86...
Free 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G01N37/00,
                                                                                                                                                                                                                                                                             G01N37/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                           PN
PP
PF
PR
                                                                                                                                                                                                                                                                                                                                       FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 501
BD241541/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
JOURNAL
                                                          ORGANISM
                                                                                                    REFERENCE
AUTHORS
TITLE
JOURNAL
 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
```

```
/db_xref="taxon:9606"
```

```
PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                             BD253914 17-JUL-2003
Regulation of repressor genes using nucleic acid molecules.
BD253914
                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucleic acid molecules FH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OS Eukaryote

N JP 2002541195-A/1707

PD 10-DEC-2000

PP 11-APR-2000

PP 12-APR-1999 US 60/129390

PR 12-APR-1999 US 60/129390

CL2NIS/09.A61K38/00,A61K48/00,A61F43/00,A61P43/00, CL2NIS/10, PC CL2P21/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (C12P21/02, C12R1:91), (C12P21/02, C12R1:91), C12N15/00, C12N5/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PC
C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD256491 17 bp DNA linear PAT 17-Regulation of repressor genes using nucleic acid molecules. BD256491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 17)
Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
Regulation of repressor genes using nucleic acid molecules
Patent: JP 2002541795-A 4284 10-DEC-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                    (bases I to 17)
Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
Regulation of repressor genes using nucleic acid molecules Patent: JP 2002541795-A 1707 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; rative 0; Mismatches 2; Indels
    17;
                                               Indels
    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'organism='Eukaryote'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Regulation of repressor genes using Location/Qualifiers
4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.7e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
```

```
Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 cagricgaagarrrr
                                                                                                                                                                                                                                                                                 unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                  BD256939
                                                                                                                                                                                                                                 BD256939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BD256940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                BD256939/c
                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD256940/c
LOCUS
DEFINITION
                                                                                                                                                               RESULT 505
                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                         g
                                                                              ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Regulation of repressor genes using nucleic acid molecules. BDD56492
BDD56492.1 GI:33066262
UP 2002541795-A/4285.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                               C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC C12P21/02,C12R1:91),(C12P21/02, PC C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,C12N5/00,C12R1:91)

C (C12N5/00,C12R1:91)

C Regulation of repressor genes using nucleic acid molecules FH Location/Qualifiers
                                                                                                                                                                                              (C12P21/02,C12R1:91), (C12P21/02,C12R1:91),C12N15/00,C12N5/00,A61K37/02,

(C12N5/00,C12R1:91)

Regulation of repressor genes using nucleic acid molecules FH Location/Qualifiers
                                                                                                          Ы
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          E 1 (bases 1 to 17)
S Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.
Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.
L Patent: JP 2002541795-A 4285 10-DEC-2002;
RIBOZYME PARAMACEUTICALS INC
BN JP 2002541795-A/4285
PN JP 2002541795-A/4285
PD 10-DEC-2002
PP 11-APR-2000 JP 2000611654
PR 12-APR-1999 US 60/129390
PI LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC C12N15/09, A61K38/00, A61K48/00, A61P43/00, C12N5/10, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Regulation of repressor genes using nucleic acid molecules FH Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (C12P21/02, C12R1:91), (C12P21/02, C12R1:91), C12N15/00, C12N5/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PC
            OS ENKATYOTE

PN JP 2002541795-A/4284

PD 10-DEC_2002

PF 11-APR-1999 US 60/129390

PI LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN C12N15/09, A61K38/00, A61K48/00, A61P43/00, A61P43/10, PC

PC 12P21/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                       organism='Eukaryote'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism='Eukaryote'
                                                                                                                                                                                                                                                                                                                                                   /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="genomic DNA"
/db_xref="taxon:32644"
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (C12N5/00, C12R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        864 CAGTIGGAACACTIT 878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A61K37/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unidentified
                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C12R1:91)
                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD256492/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                    FEATURES
               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
```

g

```
ö
                                                                                                                                                                                                                            PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cl2P21/02,Cl2P21/02//A61K31/711,(Cl2N5/10,Cl2R1:91),(Cl2P21/02, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Regulation of repressor genes using nucleic acid molecules FH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C12R1:91),
oc (C12P21/02,C12R1:91), (C12P21/02,C12R1:91),C12N15/00,C12N5/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OS EUKATYONE
PN JP 2002541795-A/4732
PD 10-DEC-2002
PF 11-APR-1999 US 60/129390
PI LAWRENCE BLAIT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN 1 C12N15/09, A61K38/00, A61K48/00, A61P43/00, A61P43/00, PC C12P21/02,
                                              Gaps
                                                                                                                                                                                                                                                                                                                                     Numidentified

unclassified.

unclassified.

1 (bases 1 to 2 wick, M., Pavco, P. and Mcswiggen, J.

Regulation of repressor genes using nucleic acid molecules
Patent. JP 2002541795-A 4732 10-DEC-2002;

RIBOZYME PHARMACEUTICALS INC

OS BUKARYOTE

PN JP 2002541795-A/4732

PD 110-DEC-2002

PF 11-APR-2000 J

PR 12-APR-1999 US 60/129390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                         Regulation of repressor genes using nucleic acid molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Regulation of repressor genes using nucleic acid molecules BD256940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 17)
Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
Regulation of repressor genes using nucleic acid molecules
Partent: JP 2002541795-A 4733 10-DEC-2002;
BIBOZYME PHARMACEUTICALS INC
OS BURATVAPE
                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .,
    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 17;
                                            Indels
                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 4.7e+02;
live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.7e+02;
Live 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism='Eukaryote'
                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="unidentified"
                                                                                                                                                                                                                          17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A61K37/02,
(C12N5/00,C12R1:91)
                                                                                                                                                                                                                                                                           BD256939.1 GI:33066709
JP 2002541795-A/4732.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD256940.1 GI:33066710
JP 2002541795-A/4733.
unidentified
                                                                                  878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         864 CAGIIGGAACACIII 878
                                                                                                                   15 CAGTIGGAAGATTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               7
                                                                             864 CAGTIGGAACACTIT
```

```
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp DNA
Sequence 2389 from patent US 6346398.
AR186901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR187114 17 bp DNF
Sequence 2602 from patent US 6346398.
AR187114 AR187114.1 GI:20233079
                                                                                                        17 bp DN.
Sequence 1713 from patent US 5646042.
153972.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                             /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR186901.1 GI:20232866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     861 CTCCAGTTGGAACAC 875
                                                                                                                                                                                                                                                                                                                                                                                                             725 ACTCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CICCAGIIGGACIC 16
                  774 TCTGAGGGCAGCCCC 788
                                                                                                                                                                                                                                                                                                                                                                                                                                      1 Acreregrearerda 15
                                             17 rereaddachaeree 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
Unclassified.
                                                                                                                                                                                                                Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                    Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 509
AR186901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 510
                                                                                       RESULT 508
153972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                    ORGANISM
                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                             AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR187114
                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                        SOURCE
                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                     Š
                                          qq
.;
0
                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DAVID J LOCKHART, THOMAS RYDER, PAMELA SKLAR
C12Q1/68, C12M1/00, C12N15/09, C12N15/09, C12N15/09, G01N33/53, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ΡI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEJOSCA 1. GI:33076002

JP 2002539849-A/234.

Synthetic construct

SW synthetic construct

artificial sequences.

E 1 (bases 1 to 17)

S Fan, J.B., Hischborn, J.N., Huang, X., Kaplan, P., Lander, E.S., Lockhart, D.J., Ryder, T. and Sklar, P.

Universal arrays

L. Patent: JP 2002539849-A 234 26-NOV-2002;

WHITHERED INSTITUTE FOR BIOMEDICAL RESEARCH, AFFYMETRIX INC

OS Artificial Sequence

PN JP 2002539449-A/234

PD 26-NOW-2002

PP 27-MAR-2000 UP 2000608794

PP 27-MAR-2000 UP 2000608794

PR 26-MAR-2000 UP 2000608794

PR 26-MAR-2000 UP 2000608794

PR 26-MAR-2000 UP 2000608794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/140359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence,
                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OS ARTILLALZ.

PN UP 2002539849-A/25%
PD 26-NOV-2002
PP 27-MAR-2000 JP 2000608794
PR 26-MAR-1999 US 60/126473,23-UUN-1999 US JINANG, PAUL KAPLAN, BRIC
PI SLANDER,
PI SLANDER,
PI SLANDER,
PI SLANDER,
PI JOCKHART, THOMAS RYDER, PAMELA SKLAR
PI JOCKHART, THOMAS RYDER, PAMELA SKLAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            G01N33/566,

PC G01N37/00,C12N15/00,C12N15/00,C12N15/00

CC Primer

FH Key Location/Qualifiers

FT source 1. 17

/organism='Artificial Se
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ce 1. .17 /organism='Artificial Location/Qualifiers
                                                                                                                                                                                                                                 /organism='Eukaryote'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .17
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                           /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11
                                                                                                                                                                                                                                                                                                                                                                                          864 CAGTIGGAACACITT 878
                                                                                                                                                                                                                                                                                                                                                                                                                   15 CAGTTGGAAGATTTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Universal arrays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD266234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD266234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 507
BD266234/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                               ð
```

```
PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pavco, P., McSwiggen, J., Stinchcomb, D. and Escobedo, J.
Pavco, P., McSwiggent for the treatment of diseases or conditions
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6346398-A 2369 12-FEB-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                        1 (bases 1 to 17)
Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T.
Stinch targeted ribozymes
Patent: US 5646042-A 1713 08-JUL-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 4.1%; Score 11.8; DB 1; Length 17; Best Local Similarity 86.7%; Pred. No. 4.7e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 4.1%; Score 11.8; DB 1; Length 17; Best Local Similarity 86.7%; Pred. No. 4.7e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
```

0

source

JOURNAL

FEATURES

Matches

AUTHORS

REFERENCE

AR187125/c LOCUS DEFINITION

RESULT 511

Db ð

ACCESSION VERSION KEYWORDS

ORGANISM

REFERENCE AUTHORS

TITLE

PAT 20-APR-2002

```
1 (bases 1 to 17)

Bavoo, P., McSwiggen, J., Stinchcomb, D. and Escobedo, J.

Method and reagent for the treatment of diseases or conditions related to levels of vascular endethelial growth factor receptor Patent: US 6346398-A 5488 12-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases I to 17)
Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 5488 12-FEB-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 11.8; DB 1; Length 17;
Pred. No. 4.7e+02;
0; Mismatches 2; Indels
                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR190000
Sequence 5488 from patent US 6346398.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR190293 17 bp DNA
Sequence 5781 from patent US 6346398.
AR190293
                                                                                                                  Sequence 5488 from patent US 6346398.
                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unknown"
                                                                                                                                                                         AR190000.1 GI:20235965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR190000.1 GI:20235965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR190293.1 GI:20236258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            871 AACACTTTCCTGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%;
                710 AGTCCCAGGAGAGTG 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AACCCTTTCCTGGGA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
Unclassified.
1 (bases 1 to 17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13; Conservative
                                                                                                                                                                                                                                              Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR190000
                                                                                                                                                                                                          Unknown,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR190000
                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                   RESULT 513
AR190000
                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 515
AR190293/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 514
AR190000/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                            SOURCE
                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                  PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·.
1 (bases 1 to 17)
Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 2602 12-PEB-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.

1 (bases 1 to 17)
Pavco, P., McSwiggen, J., Stinchcomb, D. and Escobedo, J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398.A 2613 12-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 17)
Pavco.P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 5487 12-FEB-2002;
                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity . 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                         AR187125
Sequence 2613 from patent US 6346398.
AR187125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 5487 from patent US 6346398. AR189999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned DNA"
                                                                                                                               /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                            AR187125.1 GI:20233090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR189999.1 GI:20235964
                                                                                                                                                                                                                                                       823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  873
                                                                                                                                                                                                                                                                                   rcadacrcaggring 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           871 AACACTTTCCTGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTCCAGATGGAAC 2
                                                                                                                                                                                                                                                  TCCAACTCAGGGTTG
                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              859 GGCTCCAGTTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.
                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                               13;
                                                                                                                                                                                                                                                  809
                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16
```

source

JOURNAL

FEATURES

RESULT 512 AR189999

셤

DEFINITION ACCESSION

VERSION KEYWORDS

ORGANISM REFERENCE AUTHORS

SOURCE

source

JOURNAL FEATURES

TITLE

0;

Gaps

.,0

PAT 20-APR-2002

.; 0

Gaps

0

PAT 20-APR-2002

REFERENCE

PAT 17-AUG-2003

source

JOURNAL

FEATURES

```
Unclassified.
Unclassified.

[ (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Pavco, P., McSwiggen, F. V. Stinchcomb, D.T. and Escobedo, J.
Patch of Green of Vascular endothelial growth factor receptor Patcht: US 6566127-A 1126 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 1137 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
1 (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                           Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1; 386.7%; Pred. No. 4.7e+02; ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 bp RNA
US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR323735 1137 from patent US 6566127. AR323735
                                                                                    17 bp RN
US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR324976
Sequence 2378 from patent
AR324976
AR324976.1 GI:33710784
                                                                                                 Sequence 1126 from patent
AR323724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR323735.1 GI:33709543
                                                                                                                                        AR323724.1 GI:33709532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             859 GGCTCCAGTTGGAAC 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      809 TCCAACTCAGGGTTG 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 TCAAACTCAGGTTTG 16
CICCAGITGGGACIC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTCCAGATGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 Similarity 86.7 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                     13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                        AR323724
                                                                                                                                                                                Unknown.
                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 520
AR324976
                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR323735/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                         DEFINITION
                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                             ACCESSION
                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                          JOURNAL
                                                    RESULT 51
AR323724
LOCUS
                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
Unclassified.
1 (Dases 1 to 17)
Balch, W.J. and Hogan, W.E.
Methods for fabricating an array for use in multiplexed biochemical analysis us 6479301-A 14 12-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 17-AUG-2003
                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                  PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.

1 (bases 1 to 17)

Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.

Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor patent: US 6566127-A 934 20-MAY-2003;
 Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6346398-A 5781 12-PEB-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 17;
                                                                                                                                                               Query Match

4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.7e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR323532 17 bp RN
Sequence 934 from patent US 6566127.
AR322532 GI:33709340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                            /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                  AR254036 17 bp
Sequence 14 from patent US 6479301.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                            AR254036.1 GI:27302549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         861 CTCCAGTTGGAACAC 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   774 TCTGAGGGCAGCCCC 788
                                                                                                                                                                                                                                            791 TGGTGCCAAGAGCTC 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 TCTGAGGGCAACCTC 16
                                                                                                                                                                                                                                                                              16 rgargccaagaacrc 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 86.77
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                           AR254036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
```

source

JOURNAL

FEATURES

SOURCE ORGANISM

AUTHORS TITLE

REFERENCE

DEFINITION ACCESSION VERSION KEYWORDS

RESULT 516

à d AR254036

PAT 17-AUG-2003

0

Gaps

0

PAT 17-AUG-2003

linear

source

à

JOURNAL

FEATURES

DEFINITION

LOCUS

ACCESSION VERSION

ORGANISM

KEYWORDS

REFERENCE AUTHORS TITLE

RESULT 517 AR323532

ð 임 ·.

Gaps

. 0

```
13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR328066.1
                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR328066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR328077
                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 524
AR328066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                AR325246/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                         DEFINITION
                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 525
AR328077/c
                                   RESULT 523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                           0;
                                                                                                                                                                                                                                                                  PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 2379 20-MAY-2003;
 Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 2378 20-MAY-2003; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.

1 (bases 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 2379 20-MAY-2003;
                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .,
                                                                                                              Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ative 0; Mismatches 2; Indels
                                                                                                                                         Indels
                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                           Score 11.8; DB 1;
Pred. No. 4.7e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                bp RNA
6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp RN.
US 6566127.
                                                                                 /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                Sequence 2379 from patent US
                                                       1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2379 from patent AR324977 GI:33710785
                                                                                                                                                                                                                                                                                       AR324977
AR324977.1 GI:33710785
                                                                                                                                                                  882
                                                                                                           4.18;
                                                                                                                                                                              2 AACCCTTTCCTGGGA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   871 AACACTTTCCTGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     710 AGTCCCAGGAGAGTG 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACCCTTTCCTGGGA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 AGTCCCAGGAAAGGG 3
                                                                                                                                     13; Conservative
                                                                                                                                                               871 AACACTTTCCTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                           Unclassified.
                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                             AR324977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR324977
                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                           Query Match
                                                       source
                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                   Matches
                                                                                                                                                                                                                                  RESULT 521
AR324977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR324977/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                        FEATURES
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                   VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                               ठ
                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
```

```
PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 17-AUG-2003
                                                                                                                                                  Unclassified.

1 (bases 1 to 17)

Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.

Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 65612-A. 2648 20-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 5468 20-MANY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unclassified.

1 (bases 1 to 17)

Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                        .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 17;
86.7%; Pred. No. 4.7e+02;
Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.7e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ak328066 17 bp RNA Sequence 5468 from patent US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 bp RNA
US 6566127.
AR325246 17 bp RN
Sequence 2648 from patent US 6566127.
AR325246
                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 5479 from patent | AR328077 | GI:33713885
                                                                AR325246.1 GI:33711054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GI:33713874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           791 TGGTGCCAAGAGCTC 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          809 TCCAACTCAGGGTTG 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rcaaacrcagerrre 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 TGATGCCAAGAACTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
```

```
Similarity
                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 530
AX214615/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
             RESULT 528
AX101066/C
LOCUS
DEFINITION
                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                        REFERENCE
                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX174976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                  KEYWORDS
                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 18-DEC-2003
                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Akhtar, S., Fell, P. and McSwiggen, J.A.

Akhtar, S., Fell, P. and McSwiggen, J.A.

Enzymatic nucleic acid treatment of diseases of conditions related to levels of epidermal growth factor receptors

Patent: US 6623962-A 337 23-SEP-2003;

Location/Qualifiers
                                                                                                                                                                                                                                                              PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                             I (bases 1 to 17)
Akhtar, S., Fell, P. and McSwiggen, J.A.
Bazymatic nucleic acid treatment of diseases of conditions related
Enzymatic nucleic acid treatment of diseases of conditions related
to levels of epidermal growth factor receptors
Patent: US 6623962-A 35 23-SEP-2003;
Location/Qualifiers
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 5479 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
                                                                                                                                  ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ative 0; Mismatches 2; Indels
                                                                                                    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                               linear
                                                                                                                                  Indels
                                                                                                    Query Match
4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp Di
US 6623962.
                                                        /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                            AR401695 17 bp
Sequence 35 from patent US 6623962.
AR401695. GI:40149145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .17
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 337 from patent AR401997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR401997.1 GI:40149447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                800 GAGCTCTCCTCCAAC 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  929 CACCCTCCAGAGAT 943
                                                                                                                                                             859 GGCTCCAGTTGGAAC 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 CAGCCTCCAGAGGAT 17
                                                                                                                                                                                         15 GACTCCAGATGGAAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                   Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ouery Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR401997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                       RESULT 526
                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR401997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                     AR401695
                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                           g
                                                                                                                                                                 à
```

2 GAGATCTCCTCCATC 16

qq

```
PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 03-JUL-2001
  PAT 10-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gocke, C.D. and Kopreski, M.S.
Detection of extracellular tumor-associated nucleic acid in blood plasma or serum
Patent: WO 0142504-A 5 14-JUN-2001;
THE PENN STATE RESEARCH FOUNDATION (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_txef="taxon:32630"
/noTe="oligonucleotide for hybridization assay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                               Dean, C. and Levy, Y.Y. Methods and means for modification of plant flowering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
        linear
                                                                                                                                                                                                                                                                                                                                                                                                            Score 11.8; DB 1;
Pred. No. 4.7e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                 /organism="synthetic construct"
/mol type="wnassigned DNA"
/mol type="wnassigned DNA"
/mote="faxon:32630"
/note="Oligonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
        DNA
                                                                                                                                                                                                                      characteristics
Patent: WO 0121822-A 40 29-MAR-2001;
Plant Bioscience Limited (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 4.1%; Score 11.8; Dest Local Similarity 86.7%; Pred. No. 4.7e Matches 13; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 57 from Patent W00159103. AX214615 AX214615.1 GI:15524658
17 bp
Sequence 40 from Patent W00121822.
AX101066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX174976 17 bp
Sequence 5 from Patent WO0142504.
AX174976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX174976.1 GI:14598448
                                                                AX101066.1 GI:13619922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   796 CCAAGAGCTCTCCTC 810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCTGAAGACAGCGT 855
                                                                                                       synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ||| ||||||||| ||| ||| ccargagcrcia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15 crcrcaacaaacgr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
```

```
Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S:
Matches 13
                                                                                                                                                                                                                                                                         RESULT 533
AX215511/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 534
AX218019/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                  VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                      ઠે
                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                         ·,
                                                                                                                                                                                                                                                                                                                                                                                                    PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 07-SEP-2001
                                         Blatt,L., Mcswiggen,J. and Chowrira,B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 57 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0152103-A 774 16-AUG-2001,
RIBOZYME PHARMACEUTIALS, INC. (US); Blatt, Lawrence (US); McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 952 16-AUG-2001;
                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                       ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
0
                                                                                                                                                                                                                                          Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 11.8; DB 1; Length 17;
Pred. No. 4.7e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 1:
86.7%; Pred. No. 4.7e+02;
Nismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                              /organism="synthetic construct"
/mol_type="unassigned RNA"
/mb.tzpe="taxon:32630"
/note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="synthetic construct"
| mol_type="unassigned RNA"
| db xref="taxon:32630"
| noTe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                      RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RNA
                                                                                                                                                                                                                                                                                                                                                                                              AX215332 17 bp 1 Sequence 774 from Patent W00159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX215510
Sequence 952 from Patent WO0159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                          AX215332.1 GI:15525375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX215510.1 GI:15525553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.18;
                                                                                                                                                                                                                                                                                           949 GCAAGAAGAGCCAAA 963
             artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               924 ACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 artificial sequences.
synthetic construct
                                                                                                                                                                                                                                                                                                                      16 GCAGGAAGAGCAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX215510
                                                                                                                                                                                                                                                                                                                                                                                                                            AX215332
                                                                                                                                                                                                                                                               13;
                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX215510/c
LOCUS
                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                  RESULT 531
                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                            REFERENCE
                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                  AX215332
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                     ద
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 3461 16-AUG-2001;
RIBOZIME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ; McSwiggen, James (US) ; Chowrira, Bharat M. (US)
                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US) McSwiggen, James (US); Chowrira, Bharat M. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nogo gene expression
Patent: WO 0159103-A 953 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US)
MCSWiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 17; llarity 86.7%; Pred. No. 4.78+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                           4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.7e+02;
                                                                                         /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/noTe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3461 from Patent W00159103. AX218019
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 953 from Patent W00159103. AX215511
                       McSwiggen, James (US) ; Chowr
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX215511.1 GI:15525554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX218019.1 GI:15528080
                                                                                                                                                                                                                                                                                                949 GCAAGAAGAGCCAAA 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             949 GCAAGAAGAGCCAAA 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                        17 GCAGGAAGAGCAAAA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15 GCAGGAAGAGCAAAA 1
                                                                                                                                                                                                                                                   13; Conservative
```

PAT 10-SEP-2001

linear

```
Fattaey,A.R., Jarvis,T., Mcswiggen,J., Booher,R.N. and Holman,P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk 1) enzyme
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Homínidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kmiec, B.B., Gamper, H.B. and Rice, M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: WO 0173002-A 3134 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                  PATEUR: WO 0157206-A 101 09-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Fattaey, Ali R. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%; Score 11.8; DB 1; Length 17;
86.7%; Pred. No. 4.7e+02;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               / Match 4.1%; Score 11.8; DB 1; Length 17; Local Similarity 86.7%; Pred. No. 4.7e+02; nes 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                              1. .17
/organism="synthetic construct"
/mol type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                 RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 bp DN Sequence 3135 from Patent WO0173002. AX265744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX265743 17 bp D1
Sequence 3134 from Patent WO0173002.
AX265743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                        17 bp 1
Sequence 101 from Patent WOO157206.
AX226729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX265744.1 GI:16514543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX265743.1 GI:16514542
                                                                                                                       AX226729.1 GI:15555870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           916 TTATCATCACCACCA 930
                                                                                                                                                            synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              937 AGAGAATTTTACGCA 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCTCAACACCACCA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AGAGAATTTCATGCA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                e
                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local S
Matches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                 source
                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 539
AX265744/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                            RESULT 537
AX226729
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                       VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX265743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rocns
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 10-SEP-2001
                                                                                                                                                                                                                                       PAT 07-SEP-2001
                                                                         ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk
                                                                                                                                                                                                                                                                                                                                                                                                         Blatt,L., Mcswiggen,J. and Chowrira,B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                              Moso gene expression

Patent: Wo 0159103-A 3671 16-AUG-2001;

RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US)

MCSWiggen, James (US); Chowrira, Bharat M. (US)

Location/Qualifiers

Location/Qualifiers

/organism="synthetic construct"
/mol type="unassigned RNA"
/db zref="taxon:32630"
/noTe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 0157206-A 100 09-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Fattaey, Ali R.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1; Length 17;
86.7%; Pred. No. 4.7e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                  Query Match 4.1%; Score 11.8; DB 1; Length 17; Best Local Similarity 86.7%; Pred. No. 4.7e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RNA
                                                                                                                                                                                                                                             RNA
                                                                                                                                                                                                                                   Sequence 3671 from Patent W00159103.
AX218229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp
Sequence 100 from Patent WO0157206.
AX226728
AX226728.1 GI:15555869
/note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                 AX218229.1 GI:15528290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                845 GAAGACAGCGTCCTG 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           937 AGAGAATTTTACGCA 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 AGAGAATTTCATGCA 16
                                                                                                                844 TGAAGACAGCGTCCT 858
                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 GAAGACATCCTCCTG 3
                                                                                                                                           15 TGAAGACATCCTCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1) enzyme
```

DEFINITION ACCESSION VERSION KEYWORDS SOURCE

RESULT 536

ð d AX226728

LOCUS

ORGANISM

AUTHORS TITLE

JOURNAL

FEATURES

ð qq

REFERENCE

0

Gaps

;

ORGANISM

REFERENCE AUTHORS

TITLE

JOURNAL

FEATURES

RESULT 535 AX218229/c DEFINITION

ò g ACCESSION VERSION KEYWORDS SOURCE PAT 26-OCT-2001

linear

. 0

Gaps

; 0

PAT 26-0CT-2001

linear

ö

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                        AX324853
                                                                                                                                                                                                                                                                                                                                                          AX324853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX324854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local 8
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                              source
                                                                                                                                                                                                                                                                                      RESULT 542
AX324853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX324854/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 543
                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 02-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 02-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids; lamiids; Solanales; Solanaceae; Nicotiana.
Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta, Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots, asterids, lamiids, Solanales, Solanaceae, Nicotiana.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kmiec,E.B., Gamper,H.B., Rice,M.C. and Kim,J.
Targeted chromosomal genomic alterations in plants using modified single stranded oligonucleotides
Patent: WO 0192512-A 535 06-DEC-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kmiec,E.B., Gamper,H.B., Rice,M.C. and Kim,J.
Targeted chromosomal genomic alterations in plants using modified
single stranded oligonucleotides
                                                                                                                                                                                                                                                                                     Gaps
                                                                                    with modified single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                     Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                            Kmiec, B. B., Gamper, H. B. and Rice, M.C.
Targeted chromosomal genomic alterations retranded oligonucleotides
Patranded oligonucleotides
Patent: WO 0173002-A 3135 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.7e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.7e+02;
ive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Nicotiana tabacum"
/mol_type="unassigned DNA"
/db_xref="taxon:4097"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                       17 bp
Sequence 535 from Patent WO0192512.
AX324397.1 GI:18095150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX324398 17 bp 1
Sequence 536 from Patent W00192512.
AX324398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nicotiana tabacum (common tobacco)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nicotiana tabacum (common tobacco)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX324398.1 GI:18095151
                                                                                                                                                                                                                                                                                                            916 TIATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     967 ACTCTCTAAATCTGG 981
                                                                                                                                                                                                                                                                                                                               15 TTCTCAACACCACCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 Arrcrcragarcres 2
                                                                                                                                                                                                                                                                              13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nicotiana tabacum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nicotiana tabacum
                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                source
 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                         AX324397/c
                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                            Matches
                                               REFERENCE
                                                              AUTHORS
                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX324398
                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                         g
```

à 용

```
PAT 02-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Arabidopsis thaliana (thale cress)
Arabidopsis thaliana
Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta; Magnoliophyta, eudicotyledons, core eudicots,
rosids, eurosids II; Brassicales, Brassicaceae, Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 02-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kmiec, E.B., Gamper, H.B., Rice, M.C. and Kim, J.
Targeted chromosomal genomic alterations in plants using modified
single stranded oligomuclectides
Patent: WO 0192512-A 991 06-DEC-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots;
rosids; eurosids II; Brassicales; Brassicaceae; Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kmiec,E.B., Gamper,H.B., Rice,M.C. and Kim,J.
Targeted chromosomal genomic alterations in plants using modified
single stranded oligonucleotides
Patent: WO 0192512-A 992 06-DEC-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 4.7e+02;
ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                          ch 4.1%; Score 11.8; DB 1;
1 Similarity 86.7%; Pred. No. 4.7e+02;
13; Conservative 0; Mismatches 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Arabidopsis thaliana"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Arabidopsis thaliana"
/mol_type="unassigned DNA"
/db_xref="taxon:3702"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                   /organism="Nicotiana tabacum"
/mol_type="unassigned DNA"
/db_xref="taxon:4097"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
Patent: WO 0192512-A 536 06-DEC-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX324853 17 bp 17 Sequence 991 from Patent WO0192512.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
/db_xref="taxon:3702"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 992 from Patent W00192512. AX324854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Arabidopsis thaliana (thale cress)
Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX324853.1 GI:18095606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX324854.1 GI:18095608
                                                                                                                                                                                                                                                                                                         967 ACTCTCTAAATCTGG 981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   837 TCTTCTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                                                                           2 Arrcrcragarcres 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 TCTTCTCTGAACAAA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
```

ó

PAT 12-AUG-2002

```
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                    ch 4.1%; Score 11.8; DB 1; Length 17; 1. Similarity 86.7%; Pred. No. 4.7e+02; 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zhang, J.
Humar kidney tumor overexpressed membrane protein 1
Humar kidney tumor overexpressed membrane protein 1
Humar kidney tumor overexpressed membrane protein 1
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                             Zhang, J.

Human kidney tumor overexpressed membrane protein
Patent: WO 0224750-A 787 28-MAR-2002;
Aeomica, Inc. (US)
                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp I
Sequence 789 from Patent WO0224750.
AX475568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 bp I Sequence 788 from Patent W00224750. AX475567. GI:22214852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                      17 bp 1
Sequence 787 from Patent WO0224750.
AX475566
                                                                                                                                                                                                                                                                              1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX475568.1 GI:22214853
                                                                              AX475566.1 GI:22214851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     787 CCTCTGGTGCCAAGA 801
                                                                                                                                                                                                                                                                                                                                                                                                                            787 CCTCTGGTGCCAAGA 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 CATTIGGIGCCAAGA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                               3 CATTTGGTGCCAAGA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                           Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 548
AX475568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                            DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 547
RESULT 546
                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX475567
LOCUS
             AX475566
LOCUS
                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 18-JUN-2002
                                                   .
0
                                                                                                                                                                                                  PAT 23-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Mclaughlin, F.G. a Randi, A.M.
Method and reagent for the inhibition of erg
Patent: WO 0188124-A 50 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; attive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                     linear
                                                    2; Indels
                                                                                                                                                                                                                                                                                                                                                              St Croix,B., Kinzler,K.W. and Vogelstein,B. Endochelial cell expression patterns Patent: WO 0210217-A 324 07-FEB-2002; The Johns Hopkins University (US)
                  Query Match
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA
                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                17 bp L
Sequence 324 from Patent W00210217.
AX393394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX421714 17 bp
Sequence 50 from Patent WO0188124.
AX421714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX421714.1 GI:21525096
                                                                                                                                                                                                                                                   AX393394.1 GI:19701376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         816 CAGGGTTGGCTGTGT 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 706 AGCGAGTCCCAGGAG 720
                                                                                     3 caddarrddcrercr 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTGAGACCCAGGAG 16
                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 86.73
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                     LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 545
AX421714
                                                                                                                                                                        RESULT 544
AX393394
                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                          ð
                                                                                                                        qq
```

; 0

Gaps

. 0

PAT 12-AUG-2002

PAT 12-AUG-2002

ö

Gaps

. 0

```
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                      RESULT 551
AX500259
                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 553
AX544567
                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX544566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                            PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
                                                                                                                                                         Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 4.1%; Score 11.8; DB 1; Length 17; Best Local Similarity 86.7%; Pred. No. 4.7e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                            linear
          Zhang,J.
Human kidney tumor overexpressed membrane protein.
Patent: WO 0224750-A 789 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human testis expressed patched like protein Patent: BP 1229046-A 456 07-AUG-2002; Aeomica, Inc. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human testis expressed patched like protein Patent: EP 1229046-A 457 07-AUG-2002; Aeomica, Inc. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA

    .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                     17 bp | Sequence 456 from Patent EP1229046.
AX499149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 457 from Patent EP1229046. AX499150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                               AX499149.1 GI:23381442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX499150.1 GI:23381443
                                                                                                                                                                                                                  787 CCTCTGGTGCCAAGA 801
                                                                                                                                                                                                                                    777 GAGGCCAGCCCCTCT 791
                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX499150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zhan,J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhan, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16
                                                                                                                                                                                                                                                                                                    AX499149/c
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX499150/c
LOCUS
DEFINITION
                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                        RESULT 549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
REFERENCE
             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PEATURES
                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
```

```
o;
                                                                                                                                                                                                                                          linear PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 26-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zhang,J., Gu,Y. and Nguyen,C.T.
Human udp-galnac:polypeptide n-acetylgalatosaminyltransferase 10
Patent: EP 1243660-A 79 25-SEP-2002;
Acomica, Inc. (US)
Location/Qualifiers
                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhan,J.
Human testis expressed patched like protein
Patent: BP 1229046-A 1566 07-AUG-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                               Sequence 1566 from Patent EP1229046.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX544566
Sequence 79 from Patent EP1243660.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                               AX500259.1 GI:23382552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX544566
AX544566.1 GI:25809777
                                                                                   777 GAGGCAGCCCCTCT 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               915 ATTATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         952 AGAAGAGCCAAATTG 966
                                                                                                           15 GACAGCCCCTCT 1
                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 ATTACAATCACCACC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 AGAAGAGTCAAAGTG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
```

SOURCE

```
Patent: WO 03004526-A 1899 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
1...17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                        1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX673454.1 GI:29331802
                                                                                                                                                                                                                                                                                                                                                                                  AX672252.1 GI:29330600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           918 ATCATCACCACC 932
                                                                                                                                                                                                                              832 TCTTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 ATCATCACAATCACC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                17 TCTTTCTTCGTTGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S:
Matches 13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                           source
                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                          RESULT 556
AX672252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX673454
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                     VERSION
 TITIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·.
                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 26-NOV-2002
 PAT 26-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zhang,J., Gu,Y. and Nguyen,C.T.
Human udp-galnac:polypeptide n-acetylgalatosaminyltransferase 10
Patent: EP 1243660-A 81 25-SEP-2002;
                                                                                                                                                     Zhang,J., Gu,Y. and Nguyen,C.T.

Human udp-galnac:polypeptide n-acetylgalatosaminyltransferase 10

Patent: EP 1243660-A 80 25-SEP-2002;

Aeomica, Inc. (US)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                             Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 bp D1
Sequence 135 from Patent WO03004526.
AX671690.1 GI:29330038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman, A., Amson, R. and Tuijnder, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 bp
Sequence 81 from Patent EP1243660.
AX544568
17 bp
Sequence 80 from Patent EP1243660.
AX544567
AX544567.1 GI:25809778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX544568.1 GI:25809779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              952 AGAAGAGCCAAATTG 966
                                                                                                                                                                                                                                                                                                                                                                             952 AGAAGAGCCAAATTG 966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAAGAGTCAAAGTG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                            2 AGAAGAGTCAAAGTG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 86.77
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 555
AX671690/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                    DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                            AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 554
                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX544568
                                                                                                                                                                                                                         FEATURES
```

q à

```
PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                    ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or resistance to viruses and their use as
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                       ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity 86.7%; Pred. No. 4.7e+02;
13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                       2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                               Query Match

4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 bp DNA
Sequence 1899 from Patent WO03004526.
AX673454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX672252 17 bp DNA Sequence 697 from Patent WO03004526. AX672252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent: WO 03004526-A 697 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                 Patent: WO 03004526-A 135 16-JAN-2003;
Molecular Engines Laboratories (FR)
```

```
Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX687857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mdz12
                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                     RESULT 560
AX687855/c
                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 561
AX687856/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 562
AX687857/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Пр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                     ·;
                                                                                                                                                                                                                                                 PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                    Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and their use as
                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                            Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 4.1%; Score 11.8; DB 1; Length 17; Best Local Similarity 86.7%; Pred. No. 4.7e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Indels
                                                                                                                                                                                                                                       Sequence 2279 from Patent W003004526. AX673834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: WO 03004526-A 2279 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent: WO 03004526-A 2609 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX674164
Sequence 2609 from Patent WO03004526.
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Homo sapiens"
                                                                                                                                                                                                                                                                                          AX673834.1 GI:29332182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX674164.1 GI:29332512
                                                                                                                             855 TCCTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     832 TCTTTTCTTCTGA 846
                                                                                                                                                           3 recreecreadare 17
                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 rcrrrrcrrcrraca 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 86.79
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                       medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX674164
                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                          RESULT 558
AX673834/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX674164
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                        VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                    qq
```

```
PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 31-MAR-2003
                                                                                                                                                                                                                                                   Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                               Shannon,M., Gu,Y. and Nguyen,C.T.
Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Butele
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 17;
                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match

4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred, No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.7e+02;
tive 0; Mismatches 2;
                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                   Acomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: EP 1281758-A 588 05-FEB-2003;
                                                                                                                                  Sequence 587 from Patent EP1281758.
AX687855
AX687855.1 GI:29410553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX687856 17 bp C
Sequence 588 from Patent BP1281758.
AX687856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX687856.1 GI:29410554
830 TCTCTTTTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             857 CTGGCTCCAGTTGGA 871
                                  3 referritatient 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             857 CTGGCTCCAGTTGGA 871
                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 CTGGCCCCAGCTGGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 CTGGCCCCAGCTGGA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 86.7%
Matches 13; Conservative
```

```
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           medicines
                                                                medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 566
AX726082
                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                    RESULT 565
AX724519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                    ρp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                       ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (house mouse)
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                      Query Match

4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent: WO 03025176-A 596 27-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 bp Dr Sequence 618 from Patent WO03025176. AX722931
                                                                                                                                                                                               Patent: EP 1281758-A 589 05-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 596 from Patent W003025176. AX722909.1 GI:30423410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Molecular Engines Laboratories (FR)
Location/Qualifiers
Sequence 589 from Patent EP1281758.
AX687857
                                                                                                                                                                                                              Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX722931.1 GI:30423432
                                       AX687857.1 GI:29410555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       768 TCCACTTCTGAGGGC 782
                                                                                                                                                                                                                                                                                                                                                                                          857 CTGGCTCCAGTTGGA 871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 recacireraderec 17
                                                                                                                                                                                                                                                                                                                                                                                                             15 CTGGCCCCAGCTGGA 1
                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus
                                                                                        Homo sapiens
                                                                                                                                                                                   mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX722931/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                     SOURCE
         DEFINITION
                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 563
                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX722909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                          a
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                 Gaps
Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                          Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.7e+02;
ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent: WO 03025176-A 3769 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Parent: WO 03025176-A 2206 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX726082 17 bp DNA Sequence 3769 from Patent WO03025176. AX726082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX724519 17 bp DNA Sequence 2206 from Patent W003025176. AX724519
                                                                                                    Patent: WO 03025176-A 618 27-WAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .17
/organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                      /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX726082.1 GI:30505425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX724519.1 GI:30503862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      884 GAIGCACTIACTICT 898
                                                                                                                                                                                                                                                                                                                                                                                                                       953 GAAGAGCCAAATTGA 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GATCCACGTACTICT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 GAAGAGCCTAACTGA 3
                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 86.7
Matches 13; Conservative
```

source

FEATURES

ô

Gaps

.,

PAT 08-MAY-2003

```
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.8; DB 1; Length 17; Pred. No. 4.7e+02; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                        linear
                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 186.7%; Pred. No. 4.7e+02; Ve 0; Mismatches 2; Indels
        86.7%; Pred. No. 4.7e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 medicines
Patent: WO 03025175-A 2175 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX730541 17 bp DNA Sequence 2175 from Patent W003025175.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 03025175-A 441 27-MAR-2003;
                                                                                                                                                                                                Sequence 441 from Patent W003025175. AX728807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86.7%; Prea. .v..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                               AX728807.1 GI:30508150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX730541.1 GI:30509884
                                                                925 CCACCACCTCCAGA 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          918 ATCATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            837 TCTTCTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 ATCAGCACCAGCACC 16
                                                                                                   17 ccaccaacgrccaga 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 rchrchchchanara 17
        Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 86.7.
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 86.74
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                             medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX730541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                           RESULT 569
                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                  AX728807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX730541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                    PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                           ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; vative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                       2; Indels
                                                                                                           Query Match

4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                       Sequence 4358 from Patent W003025176. AX726671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: WO 03025176-A 4358 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent: WO 03025175-A 123 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 123 from Patent W003025175. AX728489
              1. .17
/organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"

    .17
/organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                  AX726671.1 GI:30506014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX728489.1 GI:30507832
                                                                                                                                                                                        830 TCTCTTTTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      712 TCCCAGGAGAGTGAC 726
                                                                                                                                                                                                                            3 rererrirerrer 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rcccaggraaggac 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
....es 13; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
```

source

FEATURES

JOURNAL

DEFINITION

LOCUS

ACCESSION VERSION

KEYWORDS

SOURCE

RESULT 567

ð g AX726671

ORGANISM

REFERENCE AUTHORS TITLE

RESULT 568 AX728489/c LOCUS

ð

DEFINITION

ACCESSION VERSION

SOURCE ORGANISM

KEYWORDS

REFERENCE AUTHORS TITLE

JOURNAL

FEATURES

ö

Gaps

0

PAT 08-MAY-2003

ó

Gaps

0

```
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX733386/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                       RESULT 574
AX732267/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                            JOURNAL
                                                                                    AUTHORS
                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
KEYWORDS
                                                                                                                                                                       FEATURES
                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 08-MAY-2003
                                          PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                        Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6
                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.1%; Score 11.8; DB 1; Length 17;
86.7%; Pred. No. 4.7e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                medicines
Patent: WO 03025175-A 3410 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                   medicines
Patent: WO 03025175-A 2317 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3410 from Patent W003025175. AX731776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 bp DN, Sequence 3733 from Patent WO03025175. AX732099.1 GI:30511442
                                          AX730683 17 bp DNA Sequence 2317 from Patent WO03025175.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                             1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX731776.1 GI:30511119
                                                                                         AX730683.1 GI:30510026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        832 TCTTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                            830 TCTCTTTTCTTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                         3 TCTCTTTTCCTGTCT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 13; Conserv
                                                                            AX730683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                               AX730683
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX732099/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 572
AX731776/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                   RESULT 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                REFERENCE
                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                      JOURNAL
                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                             à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                            Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 17; llarity 86.7%; Pred. No. 4.7e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                Query Match

4.1%; Score 11.8; DB 1; Length 17;

Best Local Similarity 86.7%; Pred. No. 4.7e+02;

Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: WO 03025175-A 3901 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX733386 17 bp DNA Sequence 5020 from Patent WO03025175. AX733386
                                                                                                                                                                                Patent: WO 03025175-A 3733 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 3901 from Patent W003025175. AX732267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telerman, A., Amson, R. and Tuijnder, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX733386.1 GI:30512729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX732267.1 GI:30511610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  869 GGAACACTITICCTGA 883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            832 TCTTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 GGAAGTCTTTCCTGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 rcrirccricrida 3
```

```
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                         AX739163.1 GI:30518460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX739189.1 GI:30518486
                                                                                                                                        832 TCTTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     837 TCTTCTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17
                                                                                                                                                                          17 rciriccircirida 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 TCTTCTCTGACCACA
                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 579
AX739189
                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                       RESULT 57
AX739163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                      PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
 Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments.

Patent: WO 0302517-A 1017 27-MAR-2003;

Molecular Engines Laboratories (FR)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicament.

Patent: WO 03025177-A 3552 27-MAR-2003;

Molecular Engines Laboratories (FR)

Location/Qualifiers
                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                           medicines
Patent: WO 03025175-A 5020 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                            Sequence 1017 from Patent W003025177. AX735427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX737962 17 bp DM.
Sequence 3552 from Patent WO03025177.
AX737962
                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                            AX735427.1 GI:30514704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX737962.1 GI:30517250
                                                                                                                                                                                                                                              889 ACTIACTICICAGCT 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840 TCTCTGAAGACAGCG 854
                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                16 ACTTACTTCTCTGAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCTGATGACAGTG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Simi
Matches 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        m
                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                            RESULT 576
AX735427
                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX737962/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 577
                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

```
ö
                                                                                                                                                                                                                                                                                                                PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments.

Patent: WO 03025177-A 4753 27-MAR-2003;

Molecular Engines Laboratories (FR)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicements
Patent: WO 03025177-A 4779 27-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·;
Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 4.1%; Score 11.8; DB 1; Length 17; Best Local Similarity 86.7%; Pred. No. 4.7e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                               Sequence 4753 from Patent W003025177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 4779 from Patent W003025177.
AX739189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
```

DEFINITION

ACCESSION

VERSION

AX750815/c

LOCUS

RESULT 580

ð d ORGANISM

KEYWORDS SOURCE

REFERENCE AUTHORS

JOURNAL

FEATURES

```
Eukaryota; Merazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in tumoral suppression, tumoral reversion,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
medicines
Patent: WO 03040369-A 1212 15-WAY-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 17;
                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                            Zhang, J.
Human grp-activator protein for rab-like gtpase
Patent: WO 03033703-A 33 24-ARR-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                             1. Similarity 86.7%; Pred. No. 4.7e+02; 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match

4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX758986 17 bp DNA sequence 2307 from Patent W003040369. AX758986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX757891 17 bp DNA Sequence 1212 from Patent WO03040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX758986.1 GI:32253602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX757891.1 GI:32252507
GI:32133145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                925 CCACCACCTCCAGA 939
                                                                                                                                                                                                                                                                                                                                                                                         704 CCAGCGAGTCCCAGG 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 ccccchaccrccaga 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                |||||| |||||| |
15 CCAGCGGGTCCCAAG 1
                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 86.7<sup>†</sup>
Matches 13<sup>†</sup>, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                          Homo sapiens
 AX750817.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX757891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX758986/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX757891/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                        ORGANISM
                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
SOURCE
                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                     KEYWORDS
                                                                                                                                                                                                        FEATURES
   VERSION
                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                               ⋩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 20-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 20-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    o;
                                                                                                                                                       PAT 20-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred, No. 4.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human gtp-activator protein for rab-like gtpase patent: WO 03033703-A 32 24-APR-2003; Amersham Biosciences (SV) Corp. (US)
                                                                                                                                                                                                                                                                                                                                                            Human gtp-activator protein for rab-like gtpase Patent: WO 03033703-A 31 24-APR-2003; Amersham Biosciences (SV) Corp. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX750817 17 bp 1
Sequence 33 from Patent WO03033703.
AX750817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 32 from Patent WO03033703.
                                                                                                                                                         AX750815
Sequence 31 from Patent WO03033703.
AX750815
AX750815.1 GI:32133143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX750816.1 GI:32133144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           704 CCAGCGAGTCCCAGG 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           704 CCAGCGAGTCCCAGG 718
                             830 ICTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 CCAGCGGGTCCCAAG 2
                                                                rcccrrrrcrrrcr 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ccagciggrcccaag 3
                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 86.77
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zhang, J.
                                                                                                                                                                                                                                                                                                                                                Zhang, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17
                                                                  ო
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 582
AX750817/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
```

RESULT 581 AX750816/c LOCUS DEFINITION

g ð

ACCESSION VERSION

ORGANISM

KEYWORDS SOURCE

REFERENCE AUTHORS

JOURNAL

TITLE

FEATURES

ŏ g

PAT 25-JUN-2003

oʻ

Gaps

; 0

PAT 25-JUN-2003

·;

Gaps

.. 0

```
846 AAGACAGCGTCCTGG 860
                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                               medicines
                                                                                                                                                                                                                                                                    AX760583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Guo, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 588
AX782180/c
LOCUS
                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                   RESULT 587
                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                    AX760583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                   pp
                                                                                                                         ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                  .,
                                                                                                                                                                                                                                                                                                                                           linear PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                          ch 4.1%; Score 11.8; DB 1; Length 17;
1 Similarity 86.7%; Pred. No. 4.7e+02;
13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
           medicines
Patent: WO 03040369-A 2307 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent: WO 03040369-A 2330 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX759036
Sequence 2357 from Patent WO03040369,
AX759036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 03040369-A 2357 15-MAY-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                   Sequence 2330 from Patent W003040369. AX759009
                                                                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                   AX759009.1 GI:32253625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX759036.1 GI:32253652
                                                                                                                                                                                                                       832 TCTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      832 TCTTTTTTTTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                       17 rcrrrrcrrcgrrch 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 TCTTTCCTTCTTTGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                    AX759009/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                   RESULT 585
                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX759036
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
```

```
ö
                                                                                                                                                                                                                                                                                                                            PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                      ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·,
                                                                         Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 4.1%; Score 11.8; DB 1; Length 17; Best Local Similarity 86.7%; Pred. No. 4.7e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                             Query Match
4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human prostate cancer candidate protein 1
Patent: WO 03050284-A 311 19-JUM-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                  AX760583
Sequence 3904 from Patent WO03040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Modecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 511 from Patent W003050284.
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                     AX760583.1 GI:32255199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX782180.1 GI:32950029
                                                                                                                                                        896 TCTCAGCTTCTGCGA 910
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    768 TCCACTTCTGAGGGC 782
                                                                                                                                                                                                   3 rcrceecriciere 17
                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 rccaarrrrgagge 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 86.78
Matches 13; Conservative
```

```
16 GCTTCTGCAATCCGA
                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Simi
Matches 13; (
                                                    Guo, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                       RESULT 592
AX783342/c
                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 593
ORGANISM
                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD067195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                               qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
                                                                                                                                                                                                                                                                                                                                                             ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 17-JUL-2003
                                                                   PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 4.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                      linear
                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                Human prostate cancer candidate protein 1 Patent: WO 03052084-A 512 19-UUN-2003; Amersham Biosciences (SV) Corp. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Guo,J.
Human prostate cancer candidate protein
Patent: WO 03050284-A 513 19-JUN-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1672 from Patent W003050284. AX783341
                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp D1
Sequence 513 from Patent W003050284.
AX782182.
AX782182.1 GI:32950031
                                                                   AX782181 17 bp Dr
Sequence 512 from Patent W003050284.
                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX783341.1 GI:32951190
                                                                                                             AX782181.1 GI:32950030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      846 AAGACAGCGTCCTGG 860
                                                                                                                                                                                                                                                                                                                                                                                          846 AAGACAGCGTCCTGG 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                            16 AAGACACCGICTIGG 2
                                                                                                                                     Homo sapiens (human)
      ٣
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGACACCGTCTTGG
      17 AAGACACCGTCTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                   Homo sapiens
                                                                                                   AX782181
                                                                                                                                                                                                     Guo, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 591
AX783341/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
VERSION
                                                                                 DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                        AX782181/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX782182/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 590
                                                                                                                                                                                                                   TITLE
JOURNAL
                                              RESULT 589
                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                              ö
        g
```

```
Enzymatic nucleic acid treatment of diseases or conditions related to levels of epidermal growth factor receptors.

BD067195
BD067195.1 GI:22612798
unidentified
unidentified
unidentified
unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases I to 17)
Akhtar,S., Fell,P. and Mcswiggen,J.A.
Enzymatic nucleic acid treatment of diseases or conditions related
to levels of epidermal growth factor receptors
Patent: JP 20015.11003-A 35 07-AUG-2001;
RIBOZYME PHARMACEUTICALS INC,ASTON UNIV
OS Unidentified
PN JP 2001511003-A/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 11.8; DB 1; Length 17;
Pred. No. 4.7e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                    Score 11.8; DB 1; Length 17; Pred. No. 4.7e+02; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Guo,J.
Human prostate cancer candidate protein 1
Human prostate cancer 1673 19-JUN-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                               Human prostate cancer candidate protein 1 Patent: WO 03050284-A 1672 19-JUN-2003; Amersham Biosciences (SV) Corp. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX783342 1673 from Patent WO03050284.
AX783342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX783342.1 GI:32951191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901 GCTTCTGCGATCAGA 915
                                                                                                                                                                                                                                                                                               4.1%;
86.7%;
                                                                                                                                                                                                                                                                                                                                                                                901 GCTTCTGCGATCAGA 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  similarity 86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Н
                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 86.73
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gerrergeaareeaa
```

```
Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                       DEFINITION
                                         RESULT 595
                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                        BD198663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD199226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unclassified.

unclassified.

unclassified.

XA Akhtar, S., Fell, P. and Mcswiggen, J.A.

Exaymatic nucleic acid treatment of diseases or conditions related to levels of epidermal growth factor receptors

AL Patent: UP 2001511003-A 337 07-AUG-2001;

RIBOZYME PHARMACEUTICALS INC, ASTON UNIV

SO Unidentified

N JP 20015111003-A/337

PR J1-JAN-1998 UP 1999532913

PR 31-JAN-1999 UP 1999532913

PR 31-JAN-1997 US 60/036476, 04-DEC-1997 US 8AGHIR AKHTAR, PATRICIA FELL, JAMES A MCSWIGGEN PC C12N9/00, C07K14/71

CC Strandedness: Single;

CC Topology: Linear;

CC Enzymatic nucleic acid treatment of diseases or conditions CC
                                                                                                                      ပ္ပ
                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD067497 17 bp RNA linear PAT 27-AUG-2002
Enzymatic nucleic acid treatment of diseases or conditions related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ó;
                                                                         //colours:
//colours:
Topology: Linear;
Enzymatic nucleic acid treatment of diseases or conditions
related to
levels of epidermal growth factor receptors
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Topology: Linear;
Enzymatic nucleic acid treatment of diseases or conditions
                                     08/985162 PI
                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 17; 6.7%; Pred. No. 4.7e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 1 86.7%; Pred. No. 4.7e+02; ative 0; Mismatches 2; Indels
PD 07-AUG-2001
PP 14-JAN-1998 JP 1998532913
PR 14-JAN-1998 JP 1998532913
PR 3ARTYAR, PATRICIA FELL, JAMES A MCSWIGGEN PC C12N9/00, C07K14/71
CC Strandedhess: Single;
CC Topology: Linear;
CC Enzymatic nucleic acid treatment of diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              levels of epidermal growth factor receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  to levels of epidermal growth factor receptors.
                                                                                                                                                                                                    'organism='Unidentified'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'organism='Unidentified'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                 1. .17
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD067497.1 GI:22613100
JP 2001511003-A/337.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    related to
                                                                                                                                                                                                                                                                                                                                                                                 929 CACCTCCAGAGAAT 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 800 GAGCTCTCCTCCAAC 814
                                                                                                                                                                                                                                                                                                                                                                                                               CAGCCTCCAGAGGAT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             86.78;
                                                                                                                                                                                                                                                                                                                                                 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unidentified
                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD067497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD067497
                                                                                                                                                  FFFC
                                                                                                                                                                                                                                                                                                                                                                                                                m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FFE
                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 594
BD067497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

2 chearcrecrecare 16

```
EDVARATORS (CHARLES) (CTANIATE) (SM Homo sapiens (Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 17)

1 (Dases 1 to 17)

1 (Dases 1 to 18)

2 Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A.

Retoria participating in vasculogenic response (Concerning molecule participating (Concerning Molec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD19226.1 GI:33008996

How sapiens (human)

SM Homo sapiens (human)

SM Homo sapiens (human)

SM Homo sapiens (human)

Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

B 1 (bases 1 to 17)

Ravco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A.

Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response

L Patent: JP 2002509721-A 2252 02-APR-2002;

RIBOZYME PHARMACEUTICALS INC

OS Homo sapiens (human)

PN JP 2002509721-A/2252
Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response. BD1986631 GG1:3308433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD199226 17 bp RNA linear PAT 17-JUL-2003 Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-MAR-1999 JP 2000541291
27-MAR-1998 US 60/079678
PAMELA A PAUC, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, JAMES A MCSWIGGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A61P29/00,
PC A61P35/00,A61P43/00,C12NS/10,C12N9/00//A61K35/76,C12N15/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C12N5/00

Method and reagent for treating diseases or conditions concerning molecule

participating in vasculogenic response

Key

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 17;
86.7%; Pred. No. 4.7e+02;
Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="genomic_RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     707 GCGAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                                                            JP 2002509721-A/1689
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              decadirecadeada 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 Similarity 86.7 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
```

Page 146

```
Local Similarity
nes 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A61P29/00,
PC A61T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      임품답답
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD201188/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 599
                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                     RESULT 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                   Matches
                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                              BD199228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                         à
                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD19927

TOM Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.

MED19927

BD19927

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OS Homo sapiens (human)
PN JP 2002569721-A/2253
PD JP 2005569721-A/2253
PD 24-ARR-2099 JP 2000541291
PF 24-MAR-1999 JP 2000541291
PR 27-MAR-1998 US 60/079678
PI PAMELA A PAVCO, BLISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, PI JAMES A MCSWIGGEN
PC C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 17-JUL-2003
                                                                                                                                                                                                          A61P35/00, A61P43/00, C12N5/10, C12N9/00//A61K35/76, C12N15/00, PC
        PD 02-APR-2002
PF 24-MAR-1999 US 2000541291
PR 27-MAR-1999 US 60/079678
PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, PI JAMES A MCSWIGGEN
PC C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A61P29/00,
PC A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                Method and reagent for treating diseases or conditions concerning molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Method and reagent for treating diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism='Homo sapiens (human)'.
Location/Qualifiers
1. .17
                                                                                                                                                                                                                                                                                                                                                                                                'organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 4.7e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        participating in vasculogenic response Key
                                                                                                                                                                                                                                                                                                            participating in vasculogenic response Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .17
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             concerning molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      830 TCTCTTTTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tricritricritrici 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                          A61P29/00,
                                                                                                                                                                                                                                             C12N5/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ပ္ပ
                                                                                                                                                                                                                     ^{PC}
                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                       감감됐다
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 597
BD199227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
```

à

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 17)

1 (bases 1 to 17)

Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A.

Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response

In molecule participating in vasculogenic response

RIBOZYME PHARMACEUTICALS INC

OR Homo Sapiens (human)

PN JP 2002509721-A/2254

PP 24-MAR-1999 JP 2000541291

PR 27-MAR-1999 US 60/079678

PP 27-MAR-1999 US 60/079678

PP PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.
                                                                                                                                                                                                                                                        DULYYZE NAT 17-JUL-2003 Method and reagent for treating diseases or conditions concerning molecule participating in Vasculogenic response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·.
                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A61P35/00, A61P43/00, C12N5/10, C12N9/00//A61K35/76, C12N15/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Method and reagent for treating diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 17;
.larity 86.7%; Pred. No. 4.7e+02;
Conservative 0; Mismatches 2; Indels
  Length 17;
Score 11.8; DB 1; Length 1
Pred. No. 4.7e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             participating in vasculogenic response
Key Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             concerning molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD201188.1 GI:33010958
JP 2002509721-A/4214.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                         ED199228.1 GI:33008998
JP 2002509721-A/2254.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JAMES A MCSWIGGEN
     4.1%;
86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              830 TCTCTTTCTTCT 844
                                                                                                          830 TCTCTTTTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ||||||||||| |||
|TTCTTTTCTTTTCT 15
                                                                                                                                                           2 rrrcrrrrcrrrcr 16
                                                          13; Conservative
```

```
SOURCE
ORGANISM
                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 603
AR085585/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                       AR055129/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
               ÆRSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                             OS Homo sapiens (human)
PN JP 2002509721-A/4214
PD 02-APR-2002
PF 24-MAR-1999 JP 200541291
PR 27-MAR-1999 US 60/079678
PI JAMES A PAVCO. BLISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, PC 24-MARS A MCSWIGGEN
PI JAMES A MCSWIGGEN
CC12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC
Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A.
Method and reagent for treating diseases or conditions concerning
molecule participating in vasculogenic response
Patent: JP 2002509721-A 4214 02-AFR-2002;
OS HOMO SADIENS INC
OS HOMO SADIENS (Numan)
PN JP 2002509721-A/4214
PD 02-AFR-2002
PF 24-MAR-1999 JP 2000541291
PR 27-MAR-1999 JD 200541291
PR 27-MAR-1999 JD 2000541291
PR APMARA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,
PL JAMES A MCSWIGGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 22-JAN-2000
                                                                                                                                                                                                                               AGIP29/00,
PC AGIP35/00,AGIP43/00,C12N5/10,C12N9/00//AG1K35/76,C12N15/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                  Method and reagent for treating diseases or conditions concerning molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                 organism='Homo sapiens (human)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 4.7e+02;
trive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unidentified
unclassified.

1 (bases 1 to 18)
Brysch, w. and Schlingensiepen, K.
AN ANTIEBNSE OLIGONUCLEOTIDE PREPARATION METHOD
Patent: WO 9833904-A 152 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                  participating in vasculogenic response
                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 152 from Patent W09833904.
A88004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 152 from Patent EP0856579. A89971
                                                                                                                                                                                                                                                                                                                                                                                                 1. .17
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            959 CCAAATTGACTCTCT 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  776 TGAGGGCAGCCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 regeccaecacic 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A88004.1 GI:6736574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAAATTGAATTTCT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unidentified
                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A88004
                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16
                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 601
A89971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 600
      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A88004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 01-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Assay for chlamydia trachomatis by amplification and detection of chlamydia trachomatis nucleic acid
Patent: US 5837469-A 6 17-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                  ٠,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                              2; Indels
                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                      1 (bases 1 to 18)
Brysch, W.D. and Schlingensiepen, K.D.
An antisense oligonuclectide preparation method
Paten: EP 08565/9-A 152 05-AUG-1998;
BIOGNOSTIK GES (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense modulation of G-alpha-13 expression
Patent: US 5981732-A 21 09-NOV-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.9e+02;
iive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                /mol_type="unassigned_DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR085585 18 bp 1
Sequence 21 from patent US 5981732.
AR085585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 6 from patent US 5837469.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
/wol_type="unassigned DNA"

    .18
    /organism="unidentified"

                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR055129.1 GI:5980706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR085585.1 GI:10012352
                                                                                                                                                                                                                                                                                                                                                              776 TGAGGCCAGCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     878 TCCTGAGATGCACTT 892
A89971.1 GI:6738485
                                                                                                                                                                                                                                                                                                                                                                                               1 regeseckécecére 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 TACAGAGATGCACTT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclassified.
1 (bases 1 to 18)
Cowsert, L.M.
                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 86.7;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 18)
Harris, J.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                   unclassified.
                               unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
```

ö

Gaps

ö

PAT 16-JUN-2001

q à

```
1 (Dases 1 to 18)
Liskay,R.M., Bronner,C.Eric., Baker,S.M., Bollag,R.J. and
Kolodner,R.D.
Compositions and methods relating to DNA mismatch repair genes
Patent: US 6191268-A 111 20-FEB-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 18)
Friedman, J.M., Zhang, Y. and Proenca, R.
Modulators of body weight, corresponding nucleic acids and proteins, and diagnostic and therapeutic uses thereof Patent: US 6309853-A 75 30-OCT-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d.1%; Score 11.8; DB 1; Length 18; illarity 86.7%; Pred. No. 4.9e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                Length 18;
                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 4.9e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 18)
Bennett, C. Frank. and Cowsert, L.M.
Antisense modulation of CD40 expression
Patent: US 6197584-A 74 06-MAR-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .18
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 bp I
Sequence 75 from patent US 6309853.
AR175675.
GRI75675.1 GI:17916974
                                                                                                                                                                                                                                                                                                                                                                      AR138064 18 bp 1
Sequence 74 from patent US 6197584.
AR138064 GI:14479573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .18
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                        1. .18
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      851 AGCGTCCTGGCTCCA 865
                                                                                                                                                                                                                                                               969 TCTCTAAATCTGGTG 983
                                                                                                                                                                                                                                                                                              3 rereragriciders 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15 ATCTTCCTGGCTCCA 1
                                                                                                                                                                                                     Query Match
Best Local Similarity 86.74
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 13; Conserv
                              Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
 Unknown.
                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 608
AR175675
                                                                                                                                             source
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                             RESULT 607
AR138064/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                           JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                               REFERENCE
                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 16-MAY-2001
                                  0
                                                                                                                                                                          PAT 14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 18)
Liskay, R.M., Bronner, C.Eric., Baker, S.M., Bollag, R.J. and Kolodner, R.D.
Composition and methods relating to DNA mismatch repair genes patent: US 6165713-A 111 26-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·
0
                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                          4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 18;
 Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 1 86.7%; Pred. No. 4.9e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                  Unknown.
Unknown.
Unclassified.
I (bases 1 to 18)
COWSETT, L. M., Bennett, C.Frank. and O'Malley, B.W.
Antisense modulation of SRA expression
Patent: US 6107092-A 112 22-AUG-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18 bp Dr
Sequence 111 from patent US 6191268.
AR131239.1 GI:14119564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 bp Di
Sequence 111 from patent US 6165713.
AR122265.1 GI:14106582
                                                                                                                                                                      18 bp D. Sequence 112 from patent US 6107092. AR106951. GI:12821481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                   1. .18
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 969 TCTCTAAATCTGGTG 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           783 AGCCCCTCTGGTGCC 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 TCTCTAGTTCTGGTG 17
                                                                    707 GCGAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15 AGTCCCTCTGGTGTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 86.7%
Matches 13; Conservative
                                                                                         17 GCAAGTCCAAGGAGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 86.73
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
FEATURES
                                                                                                                                                                  AR106951/c
LOCUS
                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                  RESULT 604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR131239
                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR122265
LOCUS
                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
```

ð g 0;

Gaps

0;

PAT 17-DEC-2001

. 0

Gaps

. 0

ð

```
4 cccrccacacarcr 18
                                                                                                                                                                                                                                                                                13, Conservative
                                                                                                                        9H
                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 13; Conserv
                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BORCHERS
                                                                                                                                    Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            M SASMOR
                                                                                                        - SEEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OS
PP
PP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ΡI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            감감품당
                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                      BD250520/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                          611
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                        FEATURES
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                  g
                                                                                              9D232060

18 bp DNA linear PAT 17-JUL-2003
Therapeutic blockade of ICER synthesis to prevent ICIR-mediated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 17-JUL-2003
                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 18)
Cohen, P.A., Bodor, J., Weng, D.E., Koski, G.K., Czerniecki, B.J. and Bodorova, J.

Therapeutic blockade of ICER synthesis to prevent ICIR-mediated inhibition of immune cell activity
Patent: JP 2002509861-A 28 02-APR-2002;
CM Homo sapiens (human)
CM Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                 A61K45/00,A61K31/70,A61K48/00,A61P31/00,A61P35/00,A61P37/04,
                                                                                                                                                                                                                                                                                                                                                                                                                                            C12N5/10,
C12N15/09,C12N5/00,C12N15/00
Therapeutic blockade of ICER synthesis to prevent ICIR- CC
mediated inhibition
of immune cell activity
Kev
                                                                                                                                                                                                                                                                                                                                                 02-APR-2002
15-JAN-1999 JP 2000533554
27-FEB-1998 US 60/076293
PETER A COHEN, JOSEF BODOR, DAVID E WENG, GARY K KOSKI, BRIAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BD24763
BD24763.1 GT:33054533
BD244763.1 GT:33054533
BD244763.1 GT:33054533
SYNThetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 18)
Lundeberg,J. and Uhlen,M.
Isolation method of primer extension products by modular
Parent: JP 2002525076-A 42 13-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD244763 1near PAT Isolation method of primer extension products by modular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ÷0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'organism='Homo sapiens (human)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                 BD232060.1 GI:33041830
JP 2002509861-A/28.
Homo sapiens (human)
Homo sapiens
    855 TCCTGGCTCCAGTTG 869
                  4 TCCTGGCTTCATTTG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 reacrerereaarrr 4
                                                                                                                                                                                                                                                                                                                                                                                                                       JANA BODOROVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 86.77
Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         965 TGACTCTCTAAATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                oligonucleotide.
                                                                                              BD232060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DYNAL AS
                                                                                                                                                                                                                                                                                                                          감감됐당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18
                                                                                                                                                 VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                  RESULT 609
BD232060/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           610
                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD244763
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
    à
                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
```

```
BD250220.
BD250220.
BD250220.
BD250220.
Synthetic construct
SM synthetic construct
artificial sequences.
Cowsert,L.M., Baker,B.F., Mcneil,J., Freier,S.M., Sasmor,H.M.,
Brooks,D.G., Ohasi,C., Wyatt,J.R., Borchers,A.H. and Vikkars,T.A.
Identification of genetic targets for modulation by
oligonucleotides and generation of oligonucleotides for gene
modulation
Datent: JP 2002511276-A 74 16-APR-2002;
SS Artificial Sequence
PN JP 2002511276-A/74

PD 16-APR-2002
OS Artificial Sequence
PN 422002525076-A/42
PD 13-AUG-2002 1000570369
PF 15-SEP-1999 UP 2000570369
PR 15-SEP-1999 UP 09/155242,16-SEP-1998 GB 9820185.8 PI
AOAKIM LUNDEBERG,MATHIAS UHLEN
PC C12N15/99,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1221/68,C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIMOTHY A VIKKARS
C12N15/09, C07B61/00, C07B61/00, C12Q1/68, G06F17/30, G06F17/50, PC C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ы
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09/067638 PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PF 13-APR-1999 JP 2000543647
PR 13-APR-1998 US 60/081483,28-APR-1998 US 09/067638 P
LEX M COMSERT, BRENDA F BAKER, JOHN MCNEIL, SUSAN M FREIER, HENRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DOUGLAS G BROOKS, CARA OHASI, JACQUELINE R WYATT, ALEXANDER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 bulbobs20
Identification of genetic targets for modulation by oligonucleotides and generation of oligonucleotides for gene modulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ce 1.18
/organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 4.1%; Score 11.8; DB 1; Length 18; Best Local Similarity 86.7%; Pred. No. 4.9e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.9e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .18
/organism="synthetic construct"
/mol type="genomic DNA"
/db_Xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            931 CCCTCCAGAGAATTT 945
```

```
AR187571.1 GI:20233536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             854 GTCCTGGCTCCAGTT 868
                                                                                                                                                                                                                                                                                                      878 TCCTGAGATGCACTT 892
                                                                                                                                                                                                                                                                                                                                                                                                                                                  I77229.1 GI:3013383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15 GrccaGGcrcraGrr 1
                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 86.7'
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified
                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR187571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown
 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                RESULT 614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                              177229/c
Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR187571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                            FEATURES
COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Analysis of Chlamydia trachomatis by amplification and detection of Chlamydia trachomatis nucleic acid Patent: JP 1999196883-A 6 27-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B34494 linear PAT 18-JUN-2001 Analysis of Chlamydia trachomatis by amplification and detection of Chlamydia trachomatis nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TIMOTHY A VIKKARS
CI2N15/09, C07B61/00, C07B61/00, C12Q1/68, G06F17/30, G06F17/50, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ÞΙ
                                                                                                     PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                         L. LJ-AFK-1998 US 60/081483,28-APR-1998 US 09/067638 PI COWSERT, BRENDA F BAKER, JOHN MCNEIL, SUSAN M FREIER, HENRI PI PI DOUGLAS G RROUVE CONT.
                                                                                                                                                                           BD250598.1 GI:33060368
JP 2002511276-A/152.
synthetic construct
synthetic construct
artificial sequences.

[ bases 1 to 18)
Cowsert, L.M., Baker, B.F., Mcneil, J., Freier, S.M., Sasmor, H.M.,
Brooks, D.G., Ohasi, C., Wyatt, J.R., Borchers, A.H. and Vikkars, T.A.
Identification of genetic targets for modulation by
oligonucleotides and generation of oligonucleotides for gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                    BD250598 linear PAT 17-JU Identification of genetic targets for modulation by oligonucleotides and generation of oligonucleotides for gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                          modulation
Patent: JP 2002511276-A 152 16-APR-2002;
ISIS PHARMACEUTICALS INC
OS Artificial Sequence
PN JP 2002511276-A/152
PD 16-APR-2002
PP 13-APR-1999 UP 2000543647
PR 13-APR-1999 US 60/081483 28-APR-199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. 18
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E34494.1 GI:13018869
JP 1999196883-A/6.
unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    744 GIAGGICCCAGGGI 758
      851 AGCGTCCTGGCTCCA 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCTTCCTGGCTCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 18)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C12N15/00
                                                                                                                                                      modulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     James, M.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BORCHERS
                                                                                                                                                                   BD250598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   둺둺멾C
                                  15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 613
                                                                                                           LOCUS
DEFINITION
                                                                                           BD250598/c
                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                RESULT 612
                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E34494/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                          COMMENT
          à
                                  g
```

```
PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 03-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
Unclassified.
Unclassified.
I (bases I to 18)
Pavoo, P., McSviggen, J., Stinchcomb, D. and Escobedo, J.
Pavoo, P., McSviggen, J., Stinchcomb, D. and Escobedo, J.
Rethod and reagent for the treatment of diseases or conditions
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6346398-A 3059 12-FEB-2002;
Location/Qualifiers
1..18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Theses 1 to 18)
Chang, L.-J.
Retroviral expression vectors containing MOMLV/CMV-IE/HIV-TAR chimeric long terminal repeats
Patent: US 5693508.A 19 02-DEC-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                 cce 1. .18 /organism='Artifical Sequence'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 4.9e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                      C12N15/09, C12Q1/04, C12Q1/68, C12N15/00
                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR187571 18 bp DNA Sequence 3059 from patent US 6346398.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .18
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18 bp 1
Sequence 19 from patent US 5693508.
177229
                                                                                                                                                                                                                                                                                                 1. .18
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
TON DICKINSON & CO
Artifical Sequence
JP 199919683-A/6
27-JUL-1998 UP 1998309592
30-COT-1998 UP 1998309592
04-NOV-1997 US 08/963933
JAMES M HARRIS
```

0;

Gaps

.; o

Indels

Length 18;

PAT 26-SEP-2002

linear

JOURNAL

FEATURES

AR195251 LOCUS

Db

ö

Gaps

ö

PAT 20-DEC-2002

linear

Length 18;

```
1 (bases 1 to 18)
Roberts,M.L. and Cowsert,L.M.
Antiense modulation of human Rho family gene expression
Patent: US 6410323-A 148 25-UUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 18)
Friedman,J.W., Zhang,Y. and Proenca,R.
Ob polypeptides, modified forms and compositions thereto
Patent: US 6471956-A 75 29-OCT-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 18)
Friedman, J.M., Zhang, Y. and Proenca, R.
OB polypeptides, modified forms and derivatives
Patent: US 6429290-A 75 06-AUG-2002;
                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.9e+02;
7ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.8; DB 1;
Pred. No. 4.9e+02;
                                                                                                                                                                                                                                                                                                                                                                             Sequence 75 from patent US 6429290.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 75 from patent US 6471956.
AR241452
AR241452.1 GI:27287142
                                                                                                                                                                1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="genomic DNA"
                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .18
/organism="unknown"
       AR215600
AR215600.1 GI:23313856
                                                                                                                                                                                                                                                                                                                                                                                                                       AR222333.1 GI:23329818
                                                                                                                                                                                                                                                                                744 GIAGGGICCCAGGGT 758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    855 TCCTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 rccreccrrcarrrd 18
                                                                                                                                                                                                                                                                                                  15 GTAGGGACCCAGAGT 1
                                                                                                                                                                                                                                                  13; Conservative
                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                               Unknown.
                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                  source
                                               SOURCE
ORGANISM
                                                                                                      AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                   RESULT 619
AR222333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 620
AR241452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                   VERSION
                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                          0
                                                                                                                                                                                                       PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear PAT 25-SEP-2002
                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unclassified.
1 (bases 1 to 18)
Sheppard, P.O., Conklin, D.C., Farrah, T.M., Maurer, M.F. and
                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·.
                                         ch 4.1%; Score 11.8; DB 1; Length 18; 1 Similarity 86.7%; Pred. No. 4.9e+02; 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 4.1%; Score 11.8; DB 1; Length 18; Best Local Similarity 86.7%; Pred. No. 4.9e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ch 4.1%; Score 11.8; DB 1; Length 18;
1 Similarity 86.7%; Pred. No. 4.9e+02;
13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR215600
Sequence 148 from patent US 6410323.
                                                                                                                                                                                                 Sequence 75 from patent US 6350730.
AR195251
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Grossmann, A.
Soluble protein ZTMPO-1
Patent: US 6372889-A 7 16-APR-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .18
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR207351
Sequence 7 from patent US 6372889.
AR207351
                                                                                                                                                                                                                                           AR195251.1 GI:20244688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR207351.1 GI:21506237
                                                                                                861 CICCAGIIGGAACAC 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   855 TCCTGGCTCCAGTTG 869
                                                                                                                            CICCAGIIGGGACIC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      853 CGTCCTGGCTCCAGT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 rccreccrrcarric 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTCCTTGCTCCAGT 15
                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                         ٣
                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
DEFINITION
                                                                  Matches
                                                                                                                                                                     RESULT 616
                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 618
AR215600/c
                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
JOURNAL
```

REFERENCE AUTHORS

FEATURES

KEYWORDS

SOURCE

AR207351 LOCUS

P

·.

Gaps

.,

PAT 12-JUN-2003

source

JOURNAL

TITLE

FEATURES

DEFINITION

RESULT 621

g ð

AR255270 LOCUS

ORGANISM

KEYWORDS SOURCE

VERSION

REFERENCE AUTHORS

Matches

```
1 (Dases 1 to 18)
Liskay, R.M., Bronner, C.E., Baker, S.M., Bollag, R.J. and
Kolodner, R.D.
Compositions and methods relating to DNA mismatch repair genes
Patent: US 6538108-A 111 25-MAR-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.

1 (bases 1 to 18)

Cohen, D., Chumakov, I. and Blumenfeld, M.
Biallelic markers for use in constructing a high density disequilibrium map of the human genome Patent: US 6537751-A 8439 25-WAR-2003;

Location/Qualifiers
                            1 (bases 1 to 18)
Cohen, D., Chumakov, I. and Blumenfeld, M.
Biallelic markers for use in constructing a high density
disequilibrium map of the human genome
Patent: US 6537751-A 7891 25-MAR-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ch 4.1%; Score 11.8; DB 1; Length 18; 1 Similarity 86.7%; Pred. No. 4.9e+02; 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                              Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                            Query Match

4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                            AR296704 18 bp DNA Sequence 8439 from patent US 6537751. AR296704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 bp D. Sequence 111 from patent US 6538108. AR301054 GI:31688744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                           1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR296704.1 GI:31683988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  734 ATAGGACTIGGTAGG 748
                                                                                                                                                                                                                                                                                      880 CTGAGATGCACTTAC 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 ATAGGATGTGGTAGG 16
                                                                                                                                                                                                                                                                                                                        crdadardccrrrac 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 625
 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                              RESULT 624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                      AUTHORS
                                                                                                         JOURNAL
                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR301054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                 AR296704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                             FEATURES
                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 12-JUN-2003
                                                                                                                                                                 PAT 20-DEC-2002
   0
                                                                                                                                                                                                                                                                            Unknown.
Unclassified.
1 (bases 1 to 18)
Lundeberg, J. and Uhlen, M.
Methods and kits for isolating primer extension products using modular oligonucleotides
Patent: US 6482592-A 36_19-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
Unclassified.
I (bases I to 18)
Cohen, D., Chumakov, I. and Blumenfeld, M.
Biallelic markers for use in constructing a high density disequilibrium map of the human genome disequilibrium map of the human genome Patent: US 6537751-A 5889 25-MAR-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
       ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                   linear
       Indels
       2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18 bp DNA
US 6537751.
                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 bp DN. US 6537751.
       Mismatches
                                                                                                                                                                   AR255270 18 bp
Sequence 36 from patent US 6482592.
AR255270 AR255270.1 GI:27304319
                                                                                                                                                                                                                                                                                                                                                                                                                         1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR296156
Sequence 7891 from patent
AR296156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 5889 from patent
AR294154
AR294154.1 GI:31681438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR296156.1 GI:31683440
       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               978 CIGGIGIAIGGGIAI 992
                                           869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     931 CCCTCCAGAGAATTT 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                crecretricity 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4 CCCTCCAGAGCATCT 18
                                                                             4 rccreecrrcarrig 18
                                           855 ICCIGGCICCAGIIG
         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR294154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown
                                                                                                                                                                                                                                                               Unknown
         13;
```

DEFINITION

ACCESSION

VERSION KEYWORDS

RESULT 622

g

AR294154 LOCUS

ORGANISM

SOURCE

REFERENCE AUTHORS

TITLE

0

Gaps

·.

PAT 12-JUN-2003

source

JOURNAL FEATURES

LOCUS

ACCESSION VERSION KEYWORDS SOURCE

RESULT 623

ò

g

AR296156

ö

Gaps

; 0

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                         Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                       AR351536
                                                                                                                                                                                                                                                                                                 Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18
                                                         source
                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 630
AR433444/c
LOCUS
DEFINITION
                                                                                                                                                                                                             RESULT 629
AR351536/c
                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                DEFINITION
                               JOURNAL
                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                           FEATURES
                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                     ઠ
                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                       PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·,
                                                                                                                                                                                                                                                                                      Ouery Match 4.1%; Score 11.8; DB 1; Length 18; Best Local Similarity 86.7%; Pred. No. 4.9e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1487 from patent US 6566127. AR324085 AR324085.1 GI:33709893
                                                                                                                                                                               1 (bases 1 to 18)
Bennett,B. and Mathews,W.
Leptin receptor having a WSX motif
Patent: US 6541604-A 33 01-APR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 18)
Bennett, B. and Matthews, W.
Leptin receptor having a WSX motif
Patent: US 6541604-A 34 01-APR-2003;
Location/Qualifiers
                                                                                 AR302822 18 bp I
Sequence 33 from patent US 6541604.
AR302822
                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 34 from patent US 6541604.
AR302823
AR302823.1 GI:31691310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                          1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                     AR302822.1 GI:31691309
969 TCTCTAAATCTGGTG 983
                3 TCTCTAGTTCTGGTG 17
                                                                                                                                                                                                                                                                                                                                        834 TITICITCICICAAG 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              834 TTTTCTTCTCTGAAG 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 TGTACTTCTCTGAAG 16
                                                                                                                                                                                                                                                                                                                                                    17 TGTACTTCTCTGAAG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
Unclassified.
1 (bases 1 to 18)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13; Conservative
                                                                                                                                                                    Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                         RESULT 626
AR302822/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                            DEFINITION
                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                RESULT 627
AR302823
                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 628
                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR324085
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
à
                                                                                                                                                                                                                                                                                                                                       à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J. Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 656127-A 1487 20-MAY-2003; Location/Qualifiers
                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 18)
Bancroft, F.C., Fliss, M. and Clelland, C.L.
Prolactin regulatory element binding protein and uses thereof
Patent: US 6586581-A 29 01-JUL-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 18)
Bennett, C.F., Monia, B.P. and Cowsert, L.M.
Antisense modulation of NF-kappa-B p65 subunit expression
Patent: US 6656688-A 46 02-DEC-2003;
                                                                                                                                                                                                                                            ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                     Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                              ch 4.1%; Score 11.8; DB 1;
1. Similarity 86.7%; Pred. No. 4.9e+02;
13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                       /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 29 from patent US 6586581.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 46 from patent US 6656688.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="genomic DNA"
                                                                                                             1. .18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .18
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR351536
AR351536.1 GI:33753313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR433444.1 GI:40196280
                                                                                                                                                                                                                                                                             861 CTCCAGTTGGAACAC 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       831 CTCTTTTCTTCTG 845
                                                                                                                                                                                                                                                                                                   3 CTCCAGTTGGGACTC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   798 AAGAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACATTTCTTCTCTG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 AAGACTTCTCCTCCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13; Conservative
```

```
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                 AX101052/c
LOCUS
                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 635
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                         RESULT 634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX108278
                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                              FEATURES
                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 10-APR-2001
                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 07-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tate, S.N., Grose, D.T. and Hick, C.A.
Mammalian sodium channel proteins
Patent: WO 9947670-A 30 23-SEP-1999;
TATE SIMON NICHOLAS (GB); GLAXO GROUP LTD (GB); GROSE DAVID THOMAS (GB); HICK CAROLINE ANNE (GB)
                                           PAT 24-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                    ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; Attive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noTe="Oligonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                Heilig,R. and Bernot,A. Familial mediterranean fever gene Parent: WO 9909059-A 11 25-FEB-1999, GENETHON II (FR); HEILIG ROLAND (FR)
                                                                                                                                                                                                                                1 .18
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
/note="oligonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18 bp
Sequence 25 from Patent WO0121822.
AX101051.1 GI:13619907
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX017246 18 bp
Sequence 30 from Patent WO9947670.
AX017246
                                              AX005920 18 bp Sequence 11 from Patent W09909059.
                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX017246.1 GI:10042164
                                                                                     AX005920.1 GI:9928902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    801 AGCTCTCCTCCAACT 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                               873 CACTITICCIGAGAIG 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 Accretererer 18
                                                                                                                                                                                                                                                                                                                                                                                18 CCCTTGCCTGAGATG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 86.7%
Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                               unidentified
unidentified
                                                                                                                                         unclassified
                                                                         AX005920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 633
AX101051
                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                             ORGANISM
                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                   AX005920/c
                       RESULT 631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                  AUTHORS
                                                                                                                                                                                             JOURNAL
                                                                         ACCESSION
                                                                                                                                                       REFERENCE
                                                                                                   KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                             AX017246
                                                                                                                                                                                                                       FEATURES
                                                                                        VERSION
                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                 ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 30-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 10-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fell,J.D., Diaz,M.D. and Mccabe,M.S.
Method of identifying pathogenic cryptococci
Patent: Wo 0123616-A 142 05-APR-2001;
Genetic Vectors Inc. (US) ; Fell, Jack (US) ; Diaz, Mara (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dean, C. and Levy, Y.Y. Methods and means for modification of plant flowering
\ensuremath{\mbox{Dean}}\xspace, C. and \ensuremath{\mbox{Levy}}\xspace, Y.Y. Methods and means for modification of plant flowering
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                         Score 11.8; DB 1; Length 18;
Pred. No. 4.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .18
/organism="synthetic construct"
                                                                                                                            1. .18
/organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             characteristics
Patent: WO 0121822-A 26 29-MAR-2001;
Plant Bioscience Limited (GB)
Location/Qualifiers
                                     characteristics
Patent: WO 0121822-A 25 29-MAR-2001;
Plant Bioscience Limited (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 142 from Patent WO0123616.
                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                               /mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Oligonucleotide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX101052 18 bp
Sequence 26 from Patent WO0121822.
AX101052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="Oligonucleotide"
                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX108278.1 GI:13923604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX101052.1 GI:13619908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           830 TCTCTTTTCTTCT 844
                                                                                                                                                                                                                                                    4.1%;
86.7%;
                                                                                                                                                                                                                                                                                                                                   830 TCTCTTTCTTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                             2 TCTCTGGTCTTCTCT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 rerengererrer 3
                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 86.73
Matches 13; Conservative
```

PAT 01-NOV-2001

```
Barany, F., Zirvi, M., Gerry, N.P., Favis, R. and Kliman, R. Method of designing addressable array for detection of nucleic acid sequence differences using ligase detection reaction Patent: WO 0179548-A 9388 25-OCT-2001; CORNELL RESEARCH FOUNDATION, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                    Whitmore, T.E. and Sheppard, P.O.
Methods for detecting neurological disorders
Patent: WO 0177393-4 418-OCT-2001;
ZymoGenetics, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned_DNA"
/db_xref="taxon:32630"
/note="Hypothetical Probe Sequence"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.9e+02;
Live 0; Mismatches 2;

    .18
        / Organism="synthetic construct"
        /mol_type="unassigned DNA"
        /db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                  /note="Oligonucleotide ZC15486"

    18
    organism="synthetic construct"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 9388 from Patent W00179548.
AX297626
                                                                                                              Sequence 4 from Patent W00177393.
AX277634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1 from Patent W00224940.
AX474099
AX474099.1 GI:22208248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                   AX277634.1 GI:16604810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX297626.1 GI:17059317
                                                                                                                                                                                                synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         853 CGTCCTGGCTCCAGT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           776 TGAGGCAGCCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 86.73,
"...hog 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 CCTCCTTGCTCCAGT 15
     reseascascert 16
                         18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N
                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 640
AX474099
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                           RESULT 638
AX277634
                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX297626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                  SOURCE
                                                                                                            LOCUS
                         셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                    PAT 30-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 30-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genetically engineered tumor cell vaccines
Patent: WO 0154716-A 8 02-AUG-2001;
SIDNEY KIMMEL CANCER CENTER (US); THE IMMUNE RESPONSE CORPORATION (US)
                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                   Fell,J.D., Diaz,M.D. and Mccabe,M.S.
Method of identifying pathogenic cryptococci
Patent: WO 0123616-A 241 05-APR-2001;
Genetic Vectors Inc. (US) ; Fell, Jack (US) ; Diaz, Mara (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                          .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sobol, R.E., Shawler, D.L., Bartholomew, R.M., Carlo, D.J. Gold, D.P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; Live 0; Mismatches 2; Indels
                                                                       Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                    linear
                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="synthetic oligonucleotide"
                                                                   4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.9e+02;
ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noTe="Primer/Probe"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
/mol_type="unassigned_BNA"
/db_xref="taxon:32630"
/note="Primer/Probe"
                                                                                                                                                                                                                                                             Sequence 241 from Patent WO0123616.
AX108377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 8 from Patent W00154716.
AX204860
AX204860.1 GI:15394205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                AX108377.1 GI:13923703
                                                                                                                                       949 GCAAGAAGAGCCAAA 963
                                                                                                                                                                                                                                                                                                                                                   synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          949 GCAAGAAGAGCCAAA 963
                                                                                                                                                                        1 GCAAGTAGAGTCAAA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               877 TTCCTGAGATGCACT 891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAAGTAGAGTCAAA 15
                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 86.7%
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 86.7°
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .18
                                                              Query Match
Best Local Similarity
```

Source

FEATURES

RESULT 636 AX108377

Matches

DEFINITION

LOCUS

ACCESSION

VERSION KEYWORDS

SOURCE ORGANISM

AUTHORS TITLE

JOURNAL

REFERENCE

DEFINITION ACCESSION VERSION RESULT 637 AX204860/c LOCUS

SOURCE ORGANISM

KEYWORDS

REFERENCE AUTHORS JOURNAL

source

FEATURES

· 0

Gaps

·,

PAT 21-NOV-2001

0;

Gaps

0

PAT 09-AUG-2002

```
916 TTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   916 TIATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTATCATCACTACTA 16
                                                                                                                                                                                                                                                                         17 Trarcarcacracra 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 644
AX709052/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                 source
                                                                                                                                                                                                                                                                                                                          RESULT 643
AX705448
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 04-APR-2003
                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 02-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ferrara, N., Stewart, T.A., Williams, P.M., Baker, K.P., Desnoyers, L., Eaton, D.L., Gao, W.Q., Pan, J., Botstein, D., Fong, S., Goddard, A., Gadowski, P.J., Gurney, A.L., Smith, V., Tumas, D., Wood, W.I., Grimaldi, C.J., Hillan, K.J., Paoni, N.F., Roy, M.A. and Watanabe, C.K. Secreted and transmembrane polypeptides and nucleic acids encoding
                                                                                 Vivier,E., Vely,F. and Tomasello,E.
Means for the identification of compounds capable of inhibiting
karap-transduced signals
Patent: WO 0224940-A 1 28-MAR-2002;
INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM)
(FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 18; illarity 86.7%; Pred. No. 4.9e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                          ch 4.1%; Score 11.8; DB 1; Length 18; I Similarity 86.7%; Pred. No. 4.9e+02; 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="synthetic construct"
/mol_type="unassigned DNN"
Da_xref="taxon:35830"
/noTe="Synthetic oligonucleotide probe"
                                                                                                                                                                                                  1 .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="teaxon:32630"
/noTe="KARAP/DAP12 FORWARD"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent: WO 0078961-A 453 28-DEC-2000;
Genentech Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX705446 18 from Patent W003014388. 
Sequence 115 from Patent W003014388. 
AX705446.1 GI:29562111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX697385 18 bp
Sequence 453 from Patent WO0078961.
                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX697385.1 GI:29498516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      788 CTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                                                                                                                874 ACTITCCTGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                      1 ACTTTCCCAAGATGC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      crcrecrecceacie 15
                      synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               the same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX705446/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 641
AX697385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 642
                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                       REFERENCE
                                                                                      AUTHORS
                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 04-APR-2003
                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 04-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Wen,L.Y.
Isolated homozygous stem cells differentiated cells derived therefrom and materials and methods for making and using same therefrom and materials and methods for making and using same patent: WO 02102997-A 3 27-DEC-2002;
Stemron, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Distler, J., Model, F. and Taubert, H.
Method and nucleic acids for the analysis of colon cancer
Patent: WO 03014388-A 117 20-FEB-2003;
Distler,J., Model,F. and Taubert,H. Method and nucleic acids for the analysis of colon cancer Method and nucleic acids for EBE-2003; Batent: WO 03014388-A 115 20-FEB-2003; Epigenomics AG (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                             ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                         Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noTe="Detection oligonucleotide for ESR1"
                                                                                                                                                    /organism="synthetic construct"
/mol type="unassigned DNA"
/db Xref="taxon:32630"
/note="Detection oligonucleotide for ESR1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                         Query Match

4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="traxon:32630"
/noTe="Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX705448 18 bp Dl
Sequence 117 from Patent WO03014388.
AX705448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX709052 18 bp Sequence 3 from Patent WO02102997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Epigenomics AG (DE)
Location/Qualifiers
                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX709052.1 GI:29564726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX705448.1 GI:29562113
```

ORGANISM

AUTHORS REFERENCE

TITLE

JOURNAL

FEATURES

KEYWORDS SOURCE

RESULT 645

δ D

PAT 04-OCT-2003

```
ISogai,T., Sugiyama,T., Otsuki,T., Wakamatsu,A., Sato,H., Ishii,S.,
Yamamoto,J.I., Isono,Y., Hio,Y., Otsuka,K., Nagai,K., Irrie,R.,
Tamechika,I., Seki,N., Yoshikawa,T., Otsuka,M., Nagahari,K. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unidentified"
/mol type="unassigned DNA"
/mol type="unassigned DNA"
/db Xref="taxon:32644"
/note="Description of Artificial Sequence: an artificially synthesized primer se q"
                                                                                                                                                                                                                             Burger, M., Field, J.K., Genc, B., Liloglou, T., Lipscher, E., Maier, S. and Nimmrich, I.
Method and nucleic acids for the analysis of a lung cell proliferative disorder.
Patent: WO 03052135-A 853 26-JUN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Detection oligonucleotide for ESR1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 18;
                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 4.9e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Full-length cDNA sequences
Full-length cDNA sequences
Patent: EP 1347046-A 4996 24-SEP-2003;
Research Association for Biotechnology (JP)

    1. .18
    /organism="synthetic construct"

                                                               AX796510 18 bp D1
Sequence 853 from Patent WO03052135.
AX796510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX837872 18 bp DN Sequence 4996 from Patent EP1347046. AX837872 AX837872.1 GI:39921564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ďq
                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18
                                                                                                                       AX796510.1 GI:37517176
                                                                                                                                                                           synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      916 TTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   953 GAAGAGCCAAATTGA 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 TTATCATCACTACTA 2
                                                                                                                                                          synthetic construct
                                                                                                                                                                                                                                                                                                                       Epigenomics AG (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18 GCAGAGCCAAAATGA 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 86.7<sup>3</sup>
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best_Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Masuho, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD014818
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                          source
                                              AX796510/c
LOCUS
                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                               RESULT 647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX837872/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 649
BD014818
LOCUS
                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ઠે
                                              .
0
                                                                                                                                                                                                         PAT 15-APR-2003
                                                                                                                                                                                                                                                                                                                                                        Beimfohr, C. and Snaidr, J.
Method for the specific fast detection of bacteria which is harmful to beer
Patent: WO 02103043-A 258 27-DEC-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 02-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nimmrich, I.
Method and nucleic acids for the analysis of a lymphoid cell proliferative disorder
Patent: W 030044226-A 522 30-MAY-2003,
Epigenomics AG (DE)
Location/Qualifiers
                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Burger, M., Caldwell, C., Genc, B., Becker, E., Maier, S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1..18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Detection oligonucleotide for ESR1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 4.9e+02;
ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .18
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:33630"
/note="Oligonukleotid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                              Sequence 258 from Patent W002103043.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX767874 18 bp DN Sequence 522 from Patent WO03044226.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                    AX718694.1 GI:29891261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX767874.1 GI:32436560
                                                                      861 CTCCAGTTGGAACAC 875
                                                                                                                                                                                                                                                                                                                         artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  829 GICTCTTTTCTC 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      916 TTATCATCACCACCA 930
                                                                                           17 CTCCTGTTGGAATAC 3
                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 TTATCATCACTACTA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 86.77
Matches 13; Conservative
                                     13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 Vermicon AG (DE)
Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX767874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4
                                                                                                                                                                           AX718694
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
```

DEFINITION ACCESSION VERSION KEYWORDS

ORGANISM

REFERENCE AUTHORS JOURNAL

TITLE

FEATURES

RESULT 646 AX767874/c

à a

0;

Gaps

0;

PAT 15-DEC-2003

0;

Gaps

. 0

PAT 27-AUG-2002

```
C12N15/00
                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C12N15/00
                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENOTECHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Soeda, E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OS
PN
PD
PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Н
  PE PE CO
                                                                                                                                                       FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 652
BD093666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 651
BD089718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Пр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PC 21,C12NS/10, A61P9/12,C07K14/47,C07K16/18,C12N1/19,C12N1/

PC 21,C12NS/10,

PC C12NS/10,C12P21/02,C12P21/08,C12O1/68/(C12N1/19,C12N1:72), PC (C12N1/19,C12R1:72), PC (C12N1/19,C12R1:19), (C12N1/19,C12R1:72), PC (C12N1/21,C12R1:465), (C12N1/19,C12R1:39), (C12N5/10,C12R1:91), PC (C12P21/02,C12R1:91), PC (C12P21/02,C12R1:91), CC Strandedness: Single; CC Strandedness: Single; CC Topology: Linear; CC PCR primar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PI
                                                                                                                                                                                  Eukaryota, Mctazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. I Chases: 1 to 18 li Chases: 1 to 18 li Chases: 1 to 18 li Chases. 1 to 18 li Chases. 1 to 18 li Chases. I to 18 li Chase li C
Modulator of weight, corresponding nucleic acid and protein, and diagnosis and remedy utilization thereof.

BD014818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08/438431 PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JEFFRY M FRIEDMAN, YIYING ZHANG, RICARDO PROENCA, MARGHERITA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PI JEFFRY L HALAAS, KETAN KAJIWARA, STEPHEN K BURLEY PC
C12N15/09, A61K31/711, A61K38/00, A61K39/395, A61K45/00, A61K48/00,
A61P3/04,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 18) Schlingensiepen, K.H. and Brysch, W. An antisense Oligonucleotide preparation method Patent: JP 2001511000-A 152 07-AUG-2001; BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Topology: Linear;
PCR primer sWSS2367 specific in sequence tag site
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 18; larity 86.7%; Pred. No. 4.9e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                              OS Homo sapiens (human)
PN JP 20011579591-A/59
PD 12-JUN-2001
PP 29-SEP-2000 JP 2000301496
PR 30-NOV-1994 US 08/347563,10-MAY-1995 US 07-JUN-1995 US 08/348321
PI JEFFRY M FRIEDMAN,YIYING ZHANG,RICARDO PROBI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18 bp DNA lines
An antisense oligonucleotide preparation method.
BD065517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .18
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JP 2001511000-A/152
07-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD065517.1 GI:22611120
JP 2001511000-A/152.
unidentified
                                                                                         BD014818.1 GI:22555625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     855 TCCTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rccreecricaring 18
                                                                                                               JP 2001157591-A/59.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SS NA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                DEFINITION
                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                   ACCESSION
                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD065517
                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         염
```

```
PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ы
                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Artificial Sequence
JP 2001321190-A/1962
20-1001
12-MAN-2001
12-MAN-2001
BIICHI SOBDA
C12N15/09,C12N15/09,C12M1/00,C12Q1/68,G01N33/53,G01N33/566,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                            Gaps
                                                                     Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A method of arraying genome clone
Patent: JP 2001321190-A 1962 20-NOV-2001;
THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH, YUGENKAISHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                          ;
                                                                     Œ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Description of Artificial Sequence:Synthetic DNA
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; ive 0; Mismatches 2; Indels
           31-JAN-1997 BP 97101531.8
KARL HERMANN SCHLINGENSIEPEN WOLFGANG BRYSCH
C12N15/11, C07H21/104, A61K31/70
An artisense oligomucleotide preparation method
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ce 1. .18
/organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                       Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 4.9e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1..18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18 bp DNA
Human 1p36 homozygous deletion region.
BD093666
BD093666.1 GI:22639254
WO 0116311-A/21.
                                                                                                                           organism='Unknown'
                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                             18 bp
A method of arraying genome clone.
BD089718
                                                                                                                                                                 1. .18
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
30-JAN-1998 JP 1998532533
31-JAN-1997 EP 97101531
                                                                                                                                            Location/Qualifiers
                                                                                                           .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD089718.1 GI:22635328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                895 ITCICAGCITCIGCG 909
                                                                                                                                                                                                                                                                                                                                 776 TGAGGCCAGCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            artificial sequences.
1 (bases 1 to 18)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  recreactricies 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JP 2001321190-A/1962.
                                                                                                                                                                                                                                                                                                                                                                 1 TGGGGCAGCGCCTC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                13; Conservative
```

ORGANISM

SOURCE

REFERENCE AUTHORS

TITLE JOURNAL

COMMENT

Source

FEATURES

PAT 18-SEP-2002

```
Diagnosis and treatment of tyrosine phosphatase-related disorders and related methods.
                                                                                                                                                                                                                                                          OS Artificial Sequence
PN JP 2002508941-A/27
PD 26-MAR-2002
PF 18-MAR-1999 JP 2000536853
PR 18-MAR-1998 GB 9805793.8
PR DAVID THOMAS GROSE, CAROLINE ANNE HICK, SIMON NICHOLAS TATE PC C12N15/09, A61R45/00, A61P17/04, A61P25/02, C07K14/705, C07K16/28, PC C12N1/15,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Parent: JP 2002513289-A 20 08-MAY-2002;
SUGEN INC
PP 2002513289-A/20
PP 2002513289-A/20
PP 2002513289-A/20
PP 2002513289-A/20
PP 27-APR-1998 JP 1998547244
PR 28-APR-1997 US 60/044977 PR 18-JUN-1997 US 60/04477 PR 18-JUN-1997 US 60/044977 PR 18-JUN-1997 US 60/049914,23-OCT-1997 US 60/063595 PI GREG D PLOWMAN, DOUGLAS CLARY, BAHJAA JALLAL, ELIOR PELES, SUGAN PI ONBUST, PI DAVE MARKBY, SARA A COURTWINDES, HARLD APP, TERRANCE H HUI PC COTKL6/28, C12N5/12, C12N9/16, C07K14/705, C12N15/11, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unclassified.

[ Dases 1 to 18)
Plowman,G.D., Clary,D., Jallal,B., Peles,E., Onrust,S., Markby,D.,
Courtneidge,S.A., App,H. and Hui,T.H.
Diagnosis and treatment of tyrosine phosphatase-related disorders
and related methods
                                                                                                                                                                                                                                                                                                                                                                                                                                           C12N1/19, C12N1/21, C12N5/10, C12Q1/02, G01N33/15, G01N33/50, G01N33/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C12N15/00,C12N5/00
Description of Artificial Sequence: Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.1%; Score 11.8; DB 1; Length 18; 06.7%; Pred. No. 4.9e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism='Artificial Sequence'
      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Indels
                                                      BD138466.1 GI:23233411
JP 2002508941-A/27.
synthetic construct
artificial sequences.
1 (bases 1 to 18)
Grose, D.T., Hick, C.A. and Tate, S.N.
Mammalian sodium channel protein
Patent: JP 2002508941-A 27 26-MAR-2002;
GLAXO GROUP LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
        DNA
    18 bp
protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
BD138466
Mammalian sodium channel
BD138466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD191539
BD191539.1 GI:33001278
JP 2002513289-A/20.
unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       801 AGCICICCICCAACI 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 Accrercicarer 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local {
                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 655
BD191539/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                          REFERENCE
                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                      T. Vacases I LO 18)

Nakagawara, A.

Human 1p36 homozygous deletion region

Patent: WO 0116311-A 21 08-MAR-2001;

HISAMITSU PHARMACEUTICAL CO INC, CHIBA PREFECTURE, AKIRA NAKAGAWARA
OS Artificial Sequence
PN WO 0116311-A/21

PP 31-AUG-2000 WO 2000JP005930

PR 31-AUG-1999 JP 99P 245962,09-MAY-2000 JP 00P 136266 PI

AKIRA NAKAGAWARA
PC C12N15/09

CC PCR primer Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 18)

Nakagawara,A.

Human lp36 homozygous deletion region
Patent: WO 0116311-A, 22 08-MAR-2001;
HISAMITSU PHARMACEUTICAL CO INC, CHIBA PREFECTURE, AKIRA NAKAGAWARA

NO 0116311-A, 22

PD 08-MAR-2001
PF 31-ANG-2000 WO 2000JP005930
PF 31-ANG-2000 WO 2000JP005930
PR 31-ANG-1999 JP 99P 245962,09-MAY-2000 JP 00P 136266 PI
AKIRA NAKAGAWARA

PC C12N15/09
CC PCR Primer Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ó:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                            Location/Qualifiers

    .18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1..18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human 1p36 homozygous deletion region. BD093667
                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BD093667.1 GI:22639255
WO 0116311-A/22.
                  artificial sequences.
1 (bases 1 to 18)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           772 CTTCTGAGGCAGCC 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  772 CTTCTGAGGGCAGCC 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 cricedadecreace 18
    synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 86.73,
Thes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 crrcedadercadec 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13;
```

DEFINITION

ACCESSION VERSION KEYWORDS SOURCE

RESULT 653

g

BD093667

Matches

ORGANISM

AUTHORS TITLE

REFERENCE

JOURNAL

COMMENT

sonrce

FEATURES

RESULT 654 BD138466

ð

ö

Gaps

.

Key

FH

GREG D

C07K16/28, C12N5/12, C12N15/62, C12Q1/42, C12Q1/48 CC

```
Query Match
Best Local Similarity
          unidentified unclassified.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AB069438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21269192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11374902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Horii, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AB069438
                                                                                                   OS
PD
PF
PR
PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 658
AB069438/c
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PUBMED
                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C12N1/i5, C12N1/19, C12N1/21, C12N5/10, C12P21/02, C12P21/08, C12Q1/
                                                                                                                                                                                                                                                        PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                占
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGIK39/395, AGIK39/395, Cl2N15/00, AGIK37/02, AGIK37/24, Cl2N5/00 Oligonucleotide ZCl5486 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAIGELIKA GROSSMANN
CI2N15/09, A61K38/00, A61K38/22, A61P43/00, C07K14/66, C07K16/26,
C07K19/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-APR-1998 US 09/063838
PAUL O SHEPPARD, DARRELL C CONKLIN, THERESA M FARRAH, MARK F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                         BDZ06029.1 GI:33015799
JP 2002512033-A/4.
synthetic construct
synthetic construct
artifacial sequences.
1 (bases 1 to 18)
Sheppard,P.O., Conklin,D.C., Farrah,T.M., Maurer,M.F. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                           .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 18;
                                                                                                                Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 4.9e+02;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD226615
Antisense modulation of CD40 expression.
BD226615
BD226615.1 GI:33036385
JP 2002513593-A/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                             Location/Qualifiers.
                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                              Soluble protein ZTMPO-1
Patent: JP 2002512033-A 4 23-APR-2002;
ZYMOGENETICS INC

    .18
    /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

                                                                                                                                                                                                                                                            18 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-APR-2002
19-APR-1999 JP 2000544B00
21-APR-1998 US 09/06383
                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                       Artificial Sequence
JP 2002512033-A/4
                                                                                                                                                                                                                                                                      Soluble protein ZTMPO-1.
BD206029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   867
  Strandedness: Single;
CC Topology: Linear;
FH Key
                                                                                                                                                                      775 CTGAGGGCAGCCCT 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ccrccrrdcrccAgr 15
                                                                                                                                                                                            18 Crgarddcadccrcr 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   853 CGTCCTGGCTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                          Grossmann, A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MAURER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FFECECE
                                                                                                                                                                                                                                                                                                                                                                                                                                         OS
PN
PD
PF
PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 657
BD226615/c
                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
                                                            source
                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                     RESULT 656
                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                 BD206029
                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                          à
                                                                                                                                                                                                g
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 bp DNA linear SYN 21-MAY-2003 forward primer for human STS sts-W81586 at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \mathbb{F}^{C}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen,Y.Z., Hayashi,Y., Wu,J.G., Takaoka,E., Maekawa,K., Watanabe,N., Inazawa,J., Hosoda,F., Arai,Y., Mizushima,H., Morohashi,A., Ohira,M., Nakagawara,A., Liu,S., Hoshi,M., Horii,A. and Soeda,E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A61P17/06,
PC A61P3/06,
PC (21201/68,
PC (21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
Submitted (04-AUG-2001) Akira Horii, Tohoku University School of Submitted (04-AUG-2001) Akira Horii, Tohoku University School of Medicine, Molecular Pathology; 2-1 Seiryomachi, Aoba-ku, Sendai, Miyagi 980-8575, Japan (E-mail:horii@mail.cc.tohoku.ac.jp, Tel:81-22-717-8047)
Tel:81-22-717-8047)
                                                                                                                                                                                                                                                                   Unidentified
JP 2002513593-A/74
JP 2002513593-A/74
22-APR-1999 JP 2000547271
01-MAY-1999 US 09/071433
CFRANK BENNETT, LEX M COMSERT
CIRALS/09, AGIK9/10, AGIK45/00, AGIPI/00, AGIPI/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A BAC-based STS-content map spanning a 35-Mb region of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       :
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 4.9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1..18
/organism="synthetic construct"
/mol_type="genomic DNA"
/db xref="taxon:32630"
1 (bases 1 to 18)
Bennett, C.F. and Cowsert, L.M.
Britsense modulation of CD40 expression
Patent: JP 2002513593-A 74 14-MAY-2002;
ISIS PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .18
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         chromosome 1p35-p36
Genomics 74 (1), 55-70 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic construct DNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AB069438.1 GI:15130242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        851 AGCGTCCTGGCTCCA 865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Arcricciggcrcca 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 18)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
```

```
Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Koster, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR131437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown
        RESULT 661
A11086/c
LOCUS
DEFINITION
                                                                                                                                                                                                                          SOUTH
                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 663
AR131437
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
                                                             ACCESSION
                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                            AR023476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                               ;
0
                                                                                                                                                                                                                                 PAT 20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                   Unclassified.

1 (bases 1 to 20)
Popoff, I. and Wyatt, J.
Antisense modulation of damage-specific DNA binding protein 2, p48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 20)
Popoff, I. and Wyatt, J.
Antisense modulation of damage-specific DNA binding protein 2, p48
1. .18
//note="forward primer for human STS sts-W81586 at 1p36
sts-W81586 obtained from clones B406, B130014, B130015,
B258E24, B258E19, B344M8, B273D17, B169K5, Human BAC
library RPCI-11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
4.0%; Score 11.6; DB 1; Length 20;
Best Local Similarity 77.8%; Pred. No. 6e+02;
Matches 14; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                         2; Indels
                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4; Indels
                                                                         Query Match

Query Match

Best Local Similarity 86.7%; Pred. No. 4.9e+02;
Matches 13; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 77.8%; Pred. No. 6e+02;
Matches 14; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                          expression Patent: US 6379960-A 37 30-APR-2002;
                                                                                                                                                                                                                          AR208119 20 bp 1
Sequence 37 from patent US 6379960.
AR208119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Autroccard
expression
Patent: US 6379960-A 36 30-APR-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AKZUBI18
Sequence 36 from patent US 6379960.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .20
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        785 CCCCTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                785 CCCCTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                   AR208119.1 GI:21508052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ARZ08118
ARZ08118.1 GI:21508051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCATCTGGAGCCAGGAG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 CTCATCTGGAGCCAGGAG 1
                                                                                                                                868 TGGAACACTTTCCTG 882
                                                                                                                                                       17 redaccecriricere 3
                                                                                                                                                                                                                                                                                                                                                                                                                     1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.
                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR208118
                                                                                                                                                                                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                           AR208119/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 660
AR208118/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                              ð
                                                                                                                                                       q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
```

```
PAT 03-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                     ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 05-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                     ó.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.

1 (bases 1 to 15)
Cantor, C.R., Przetakiewicz, M., Smith, C.L. and Sano, T. Method for replicating an array of nucleic acid probes Patent: US 5795714-A 1 18-AUG-1998;
                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 4.8e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ch 3.9%; Score 11.4; DB 1;
1 Similarity 92.3%; Pred. No. 4.8e+02;
12; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                     /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                        synthetic construct
synthetic construct
artificial sequences.
| (bases 1 to 15)
| Ikehara,M. and Kida,M.
Synthetic gene for human lysozyme
Patent: EP 0181634-A 30 21-MAY-1986;
Takeda Chemical Industries, Ltd
DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA sequencing by mass spectrometry
Patent: US 6194144-A 21 27-FEB-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15 bp
Sequence 1 from patent US 5795714.
AR023476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 L5 bp 1
Sequence 21 from patent US 6194144.
ARI31437
ďq
15
                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR131437.1 GI:14120340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR023476.1 GI:3976770
            Oligonucleotide L12.
                            A11086.1 GI:490936
                                                                                                                                                                                                                                                                                                                                                                                             959 CCAAATTGACTCT 971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 792 GGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                      Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 GGTTCCAAGAGCT 15
                                                                                                                                                                                                                                                                                                                                                                                                                             15 ccaaarraacrcr 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.
1 (bases 1 to 15)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
FEATURES
```

. 0

Gaps

.,

ORGANISM

SOURCE

ACCESSION VERSION KEYWORDS

RESULT 664

ð g AR132774

TITLE JOURNAL FEATURES

AUTHORS REFERENCE

PAT 03-SEP-2003

source

```
Lok, S. and Whitmore, T.E.
The insulin receptor-related receptor gene sequence for diagnosis
of human obesity and diabetic disorders
Patent: Wo 0065090-A 40 02-NOV-2000;
ZymoGenetics, Inc. (US)
Location/Qualifiers
                                                                            Unclassified.

1 (bases 1 to 15)
Nakahama, K., Kaisho, Y. and Yoshimura, K.
Method for increasing gene expression using protease deficient
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.9%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 4.8e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                               Length 15;
                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                               Score 11.4; DB 1; Length 1 Pred. No. 4.8e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .15
/organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           yeasts
Patent: US 5182195-A 45 26-JAN-1993;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                           AR362711 15 bp i
Sequence 45 from patent US 5182195.
AR362711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 40 from Patent WO0065090.

    15.
    /organism="unknown"
    /mol_type="genomic DNA"

                                                                                                                                                                1. .15
/organism="unknown"
/mol_type="mRNA"
                                                                                                                                                                                                                  3.9%; Scc
ilarity 92.3%; Pre
Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX040895.1 GI:11340517
                                                                                                                                                                                                                                                                                                                                                                                                                AR362711.1 GI:34423091
AR221850
AR221850.1 GI:23328965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             959 CCAAATTGACTCT 971
                                                                                                                                                                                                                                                                         792 GGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                    GGTTCCAAGAGCT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAAATTAACTCT 3
                                                                  Unclassified.
                                                                                                                                                                                                                                  Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                      Unknown.
                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15
                                                                                                                                                                                                                                                                                                       ń
                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 668
AX040895/c
                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                RESULT 667
                                                                                                                                                                                                                                                                                                                                                              AR362711/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                      JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                  REFERENCE
                                                                                               AUTHORS
                           KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
                                                                                                                          TITLE
               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 08-AUG-2001
                                                                                                                                                                                                            PAT 16-MAY-2001
                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 11.4; DB 1; Length 15;
Pred. No. 4.8e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                        Score 11.4; DB 1; Length 15; Pred. No. 4.8e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                           Clases 1 to 15)
Stinchcomb, D.T., Jarvis, T. and McSwiggen, J.
Nucleic acid based inhibition of CD40
Patent: US 6194150-A 1199 27-FEB-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 4.8e+02;
iive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Koster,H.

No sequences by mass spectrometry

DNA sequences by mass spectrometry

Patent: US 6238871-A 21 29-MAY-2001;

Patent: Location/Qualifiers
                                                                                                                                                                                                               15 bp DN Sequence 1199 from patent US 6194150.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15 bp ...
ARL54243
AR154243.1 GI:15122296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR221850 15 bp
Sequence 31 from patent US 6428955.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                  1. .15
/organism="unknown"
/mol_type="unassigned DNA"
        1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                        AR132774.1 GI:14121679
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative (
                                                              Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 792 GGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           833 CTTTTCTTCTG 845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
Unclassified.
1 (bases 1 to 15)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTTCCAAGAGCT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          792 GGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                             3 GGTTCCAAGAGCT 15
                                                                                                                                                                                                                                                                                                    Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                AR132774
                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR221850
LOCUS
DEFINITION
                                                                                                                                                                                                                   LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 666
```

RESULT 665

셤 δ

AR154243

REFERENCE

SOURCE

FEATURES

Matches

g à

ö

Gaps

; 0

PAT 23-NOV-2000

```
PAT 12-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 18-SEP-2002
                                                                                                                                                                                                      Lin, C.Y., Lin, R.W., You, C.M., Huang, H.H., Lee, B.H., Lee, H.H., Lin, Y.J., Fan, C.C., Hsu, H.C., Shih, C.W., Yeh, C.H., Kao, Y.F., Pan, C.L. and Chan, P. Method and detector for identifying subtypes of human papilloma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PI DIRK VAN DEN BOOM, CHRISTIAN JURINKE, ANDREAS RUPERT PC
C12Q1/68, C07H21/00, C07F9/24
CC Strandedness: Single;
                                                                                                                                                                                                                                                                                                                                         /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
/noTe="Oligonucleotide for Identifying HPV 62"
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                          Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 15;
                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ו באטע על 15 bp DNA linea DNA diagnosis method based on mass spectrometry.
BD132099
                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 4.8e+02;
live 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1;
                                                                            DNA
                                                                                                                                                                                                                                                                            Patent: BP 1302550-A 376 16-APR-2003;
King Car Pood Industrial Co., Ltd. (TW)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers

    .15
        /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

                                                                         AX742573
Sequence 376 from Patent EP1302550.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                 AX742573.1 GI:30576541
                                                                                                                                            synthetic construct
Synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Topology: Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            765 GCCTCCACTTCTG 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 GCCTCCACTGCTG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                12; Conservative
                                                                       AX742573
                                                                                                                                                                                                                                                                    viruses
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                              source
                                                                                  DEFINITION
                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
                                        RESULT 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                  ACCESSION
                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                        AX742573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD132099
                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       셤
                                                                                               ö
                                                                                                                                                                                                                                PAT 08-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 18-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                       Koester, H., Little, D.P., Braun, A., Jurinke, C., van den Boom, D., Xiang, G., Lough, D.M., Ruppert, A. and Hillenkamp, F. Dna diagnostics based on mass spectrometry Patent: EP 1164203-A 31 19-DEC-2001; SEQUENCM, INC. (US)
                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                              Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.4; DB 1; Length 15; Pred. No. 4.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.4; DB 1; Length 15;
80.0%; Pred. No. 4.8e+02;
tive 1; Mismatches 2; Indels
                                                                                          Indels
                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                           Score 11.4; DB 1;
Pred. No. 4.8e+02;
                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kliem, S.E., Koshy, B. and Lanz, E.M. Haplotypes of the ntf3 gene Patent: WO 0212499-A 8 14-FEB-2002; Genaissance Pharmaceuticals, Inc. (US) Location/Qualifiers
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Oligonucleotide"
                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .15
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .15
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                       Sequence 31 from Patent EP1164203.
AX328534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15 bp
Sequence 8 from Patent WO0212499.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                   AX328534.1 GI:18101733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX377344.1 GI:19573630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%;
                                                      Query Match 3.9%;
Best Local Similarity 92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       837 TCTTCTCTGAAGACA 851
                                                                                                                 916 TTATCATCACCAC 928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     792 GGTGCCAAGAGCT 804
                                                                                     12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15 TGTTCTCYGAAGTCA 1
                                                                                                                                    12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12; Conservative
                                                                                                                                                                                                                                                                                                                              unclassified.
                                                                                                                                                                                                                                                                                             unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 12; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 m
                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                     Matches
                                                                                                                                                                                         RESULT 669
```

TITLE JOURNAL

FEATURES

REFERENCE AUTHORS

KEYWORDS

SOURCE

AX328534 LOCUS

ò

DEFINITION

LOCUS

ACCESSION VERSION

RESULT 670 AX377344/c ORGANISM

KEYWORDS SOURCE

AUTHORS

JOURNAL

FEATURES

6

REFERENCE

ö

Gaps

HUBERT

rge.res

```
Patent: JP 2002512791-A 1904 08-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                           PAVCO,
                                                                                                                                                                                                                                                                PC PC CC
                                                                                                                                                                                                                                                                                                                                                                                                                   강료답답
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 676
AR328479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR029841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The continue and sequences.

The continue and sequences.

The continue and sequences.

Huang, C., Lin, R., Yoo, Z., Huang, X., Lee, B., Lee, S., Lin, Y.,

Huang, C., Hgu, H., Shi, C., Yeh, C., Cao, Y. and Pan, C.

Huang, C., Hgu, H., Shi, C., Yeh, C., Cao, Y. and Pan, C.

Huang, C., Hgu, H., Shi, C., Yeh, C., Cao, Y. and Pan, C.

Mand and detector for identifying subtypes of human papiloma

Land Car Food Industrial Co LTD

Satisficial Sequence

No. Artificial Sequence

No. Artificial Sequence

Proposition of the continue and continu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OS Artificial Sequence
PN JP 2002360271-A/405
PP 17-DEC-2002
PP 2002360271-A/405
PP 2002360271-A/405
PP 17-DEC-2001
PP 2001362595
PR 04-MAY-2001 TW 90110785
PI CHING-YEE LING, RUEY-WEN LIN, ZHOU-MENG YOO, XIN-HSUAN HUANG, BOW-PI SHENG-HSIUNG LEE, YI-JU LIN, CI-CHUNG HUANG, HAN-CHANG HSU, CHA-PI CHIH-XIN YEH, YI-FENG CAO, CHIH-LONG PAN
PI CHIH-XIN YEH, YI-FENG CAO, CHIH-LONG PAN
PC C12015/09, C12015/09, C1201/34, C1201/42, C1201/68 PC
C1201/70, G01N31/64,
PC (C1201/70, C12R1:93), C12N15/09, C12N15/00
CC Oligonucleotide M6201 for identifying HPV 62. FH Key
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.

BD208314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unidentified unclassified.

1 (bases 1 to 15)
Blatt, L., Mcswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
Blatt, L., Mcswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
Blatt, L., Mcswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
Blatt, L., Mcswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
                                                                                                                                                                                                                                                                           PAT 17-JUN-2003
                                        ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                     BD184426 15-DV DNA linear PAT 17-JUN Method and detector for identifying subtypes of human papiloma
                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism='Artificial Sequence'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 4.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .15
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                  Pred. No. 4.8e+02;
0; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD208314.1 GI:33018084
JP 2002512791-A/1904.
unidentified
                                                ..
                                                                                                                                                                                                                                                                                                                                                                                   BD184426.1 GI:31876626
JP 2002360271-A/405.
                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct
synthetic construct
artificial sequences.
                        92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          765 georgescripting 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 GCCTCCACTGCTG 15
                                                                                                  792 GGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                          GGTTCCAAGAGCT 15
                                                     12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                        Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                BD184426
                                                                                                                                                          m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                RESULT 673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD208314
                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                BD184426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                          g
                                                                                                             à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                             DENNIS MACEJAK
C12N9/00, A61K31/7105, A61K38/21, A61K48/00, A61P31/12, C12N15/09,
A61K3/66,
C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Enzymatic nucleic acid treatment of diseases or conditions
                                                                                                                                                                  60/100842 PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism='Hepatitis virus (hepatitis C
               OS Hepatitis virus (hepatitis C virus)
DS 2002512791-A/1904
DD 08-MAY-2002
DF 26-APR-1999 US C0/083217,18-SEP-1998 US C0/100842
DS-FEB-1999 US C0/257608,23-MAR-1999 US C0/257608,2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.4; DB 1; Length 16; 92.3%; Pred. No. 5.2e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 11.4; DB 1;
Pred. No. 4.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 bp RNA
Sequence 5881 from patent US 6566127.
AR328479
AR328479.1 GI:33714287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR029841 16 bp | Sequence 30 from patent US 5861244. AR029841 GI:5943055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .15
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         virus)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      related to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     894 CTTCTCAGCTTCT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  805 CICCICCAACTCA 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 crrcrcrdcrrcr 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 chechccaachca 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.0 Match
Best Local Similarity 92.3
Matches 12; Conservative
```

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                  RESULT 679
BD225192/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD225194/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ਨੇ
                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                            PAT 20-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 20-NOV-2001
            1 (bases 1 to 16)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 5881 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                               Degitz,K.K. and Besch,R.
Polydesoxyribonucleotides for inhibiting the expression of the icam-1-gene Patent: WO 0179487-A 50 25-OCT-2001;
Degitz, Klaus Karl (DE); Besch, Robert (DE)
Location/Qualifiers
                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Degitz,K.K. and Besch,R. Polydesoxyribonucleotides for inhibiting the expression of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·
0
                                                                                                                                                                 Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4; DB 1; Length 16; 92.3%; Pred. No. 5.2e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | ...16
| /organism="synthetic construct"
| mol_type="unassigned DNA"
| db_xref="taxon:32630"
| note="Beschreibung der Kunstlichen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent: WO 0179487-A 51 25-OCT-2001;
Degitz, Klaus Karl (DE); Besch, Robert (DE)
Location/Qualifiers
                                                                                                                                                      Query Match
Best Local Similarity 92.3%; Pred. No. 5.2e+02;
Matches 12; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequenz:Polydesoxyribonukleotid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .16
/organism="synthetic construct"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                     Sequence 50 from Patent WO0179487.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX284086
Sequence 51 from Patent WO0179487.
                                                                                                                  /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                              AX284085.1 GI:17044795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX284086.1 GI:17044796
                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                 838 CITCICIGAAGAC 850
                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                763 AGGCCTCCACTTC 775
                                                                                                                                                                                                                                           4 CTTCTCTGAGGAC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 AGGCCTCCCTTC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                  1. .16
Unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              icam-1-gene
Patent: WO 0
                                                                                                                                                                                                                                                                                                                   AX284085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX284086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX284086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12;
                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
            REFERENCE
                        AUTHORS
                                                                  JOURNAL
                                                                                                                                                                                                                                                                                        RESULT 677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 678
AX284086/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                    AX284085
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                           Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
```

```
ö
                                                                                                                                                                                                                                                                                                                        PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human papilloma virus inhibition by antisense oligonucleotides
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OS Human papilloma virus 16
PN JP 2002509692-A/5
PD 02-AFR-2002
PF 03-SEP-1999 JP 2000510858
PR 05-SEP-1997 US 08/929140
PI JOSEPH DIPAOLO,LUIS ALVAREZ SALAS
C12N15/09,A61K31/7125,A61K48/00,A61P35/00//C07K14/025,C12N9/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                 unidentified
unclassified.

1 (bases 1 to 16)
Dipaclo, J. and Salas, L.A.
Human papilloma virus inhibition by antisense oligonucleotides
Patent: JP 2002509692-A 5 02-APR-2002;
THE UNITED STATES OF AMERICA
                                                                                                                                                                                                                                                                                                                    BD225192
Human papilloma virus inhibition by antisense oligonucleotides
                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unclassified.

1 (bases 1 to 16)
Dipaolo, J. and Salas, L.A.
Human papilloma virus inhibition by antisense oligonucleotides
Patent: JP 2002509692-A 7 02-APR-2002;
THE UNITED STATES OF AMERICA
OS Human papilloma virus 16
N JP 2002509692-A/7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         אסט 16 bp DNA linear PAT 17-JUL.
Human papilloma virus inhibition by antisense oligonucleotides
BD225194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism='Human papilloma virus 16'
Location/Qualifiers
                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·.
                                                                                            Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.4; DB 1; Length 16; 92.3%; Pred. No. 5.2e+02; Live 0; Mismatches 1; Indels
                                                                                                                                Indels
/db_xref="taxon:32630"
/note="Beschreibung der kunstlichen
Sequenz:Polydesoxyribonukleotid"
                                                                                     Score 11.4; DB 1;
Pred. No. 5.2e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .16
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .16
                                                                                                                                                                                                                                                                                                                                                                       BD225192.1 GI:33034962
JP 2002509692-A/5.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD225194.1 GI:33034964
JP 2002509692-A/7.
unidentified
unidentified
                                                                                   Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                              763 AGGCCTCCACTTC 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             837 TCTTCTCTGAAGA 849
                                                                                                                                                                                                         14 AGGCCTCCCTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 rGrrcrcrcaAGA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                BD225192
                                                                                                                                                                                                                                                                                                                                                        BD225192
```

0;

```
910 ATCAGATTATCAT 922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14 AACAGATTATCAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 16)
Balzergue, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Direct Submission
                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                14 AACAGATTATCAT 2
                                                                                                           Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12446565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc feature
                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 683
AX759333/c
                                                                                                                                                                                                                                                                                                                                                                                                                                   ATH521052/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Submitted (21-NOV-2002) Balzergue S., UMRGV, INRA/CNRS, 2 rue Submitted (21-NOV-2002) Balzergue S., UMRGV, INRA/CNRS, 2 rue Gaston Cremieux, 91057 Evry cedex, FRANCE provided on DNA from transformants of Arabidopsis thaliana plants from INRA (Versailles). The DNA fragment (s) resulting from the PCR were directly sequenced from the left or the right border to determine the genomic sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display of the insertion site are available at http://dbsgap.versailles.inra.fr/publiclines/. This sequence has been generated in the framework of the French plant genomics program 'Genoplante' (http://www.genoplante.com and http://genoplante.info.infobiogen.fr).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATH521051 16 bp DNA linear PLN 29-MAR-2003
Arabidopsis thaliana T-DNA flanking sequence, left border, clone
                                                                                                                                                                                                                                 Human papilloma virus inhibition by antisense oligonucleotides Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AJ521051.1 GI:26789287
left border, T-DNA flanking sequence.
Arabidopsis thaliana (thale cress)
Arabidopsis thaliana
Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta, Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots, rosids; eurosids II; Brassicales; Brassicaceae, Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Erunaud, V., Balzergue, S., Dubreucq, B., Aubourg, S., Samson, F., Chauvin, S., Bechtold, M., Cruaud, C., DeRose, R., Pelletier, G., Lepiniec, L., Caboche, M. and Lecharny, A.
T-DNA integration into the Arabidopsis genome depends on sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="genomic DNA"
/cultivar="Wassillewekija"
/cultivar="Wassillewekija"
/db.xref="teaxon:3702"
/clone="051G01"
/clone_lib="Arabidopsis thaliana T-DNA insertion lines"
pp 02-APR-2002
PF 03-SEP-1998 JP 2000510858
PR 05-SEP-1997 US 08/929140
PR 05-SEP-1997 US AGINABLE SALAS
C12N15/09, AGIN31/7125, AGIN48/00, AGIP35/00//C07K14/025, C12N9/00, C12N15/00
CC Human papilloma virus inhibition by antisense oligonucleotify Rey 1...16
PR 05-SEP-1997 US 05-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 3.9%; Score 11.4; DB 1; Length 16; 1 Similarity 92.3%; Pred. No. 5.2e+02; 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .16
/organism="Arabidopsis thaliana"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            of pre-insertion sites
EMBO Rep. 3 (12), 1152-1157 (2002)
22363535
                                                                                                                                                                                                                                                                                                                                                                                                                           ....16
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 837 TCTTCTCTGAAGA 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 16)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14 rgrrcrcrcaaca 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Balzergue, S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AJ521051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12446565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              051G01,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATH521051/c
                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
```

```
Submitted (21-NOV-2002) Balzergue S., UMRGV, INRA/CNRS, 2 rue Submitted (21-NOV-2002) Balzergue S., UMRGV, INRA/CNRS, 2 rue Gaston Cremieux, 91057 Evry cedex, FRANCE PCR was performed on DNA from transformants of Arabidopsis thaliana plants from INRA (Versailles). The DNA fragment (s) resulting from plants from INRA (Versailles). The DNA fragment (s) resulting from the PCR were directly sequence flanking the insertion. T-DNA derived sequences were removed. Information to order the corresponding mutant line and a link to a database providing a graphical display of the insertion site are available at http://dbsgap.versailles.inra.fr/publiclines/. This sequence has program 'Genpolante' (http://www.genoplante.com and pennics program 'Genoplante' (http://www.genoplante.com and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Brunaud, V., Balzergue, S., Dubreucq, B., Aubourg, S., Samson, F.,
Chauvin, S., Bechcold, N., Cruaud, C., DeRose, R., Pelletier, G.,
Lepiniec, L., Caboche, M. and Lecharny, A.
T-DNA integration into the Arabidopsis genome depends on sequences
of pre-insertion sites
12363535
                                                                                                                                                                                                                                                                                                                                                                                                                                             ATH521052 16 bp DNA linear PLN 29-MAR-2003
Arabidopsis thaliana T-DNA flanking sequence, left border, clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bukaryota, Viridiplantae, Streptophyta, Embryophyta, Tracheophyta,
Spermatophyta, Magnoliophyta, eudicotyledons, core eudicots,
rosids, eurosids II, Brassicales, Brassicaceae, Arabidopsis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone_lib="Arabidopsis thaliana T-DNA insertion lines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4; DB 1; Length 16; 2.3%; Pred. No. 5.2e+02; ve 0; Mismatches 1; Indels
                                                                                                    Score 11.4; DB 1; Length 16;
Pred. No. 5.2e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Arabidopsis thaliana"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .16
/note="T-DNA flanking sequence
left border"
/note="T-DNA flanking sequence
left border"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          http://genoplante-info.infobiogen.fr)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               left border; T-DNA flanking sequence.
Arabidopsis thaliana (thale cress)
Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol type="genomic_DNA"
/cultivar="Wassillewskija"
/db_xref="taxon:3702"
/clone="051G02"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AJ521052
AJ521052.1 GI:26789288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92.3%;
                                                                                                                 3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.9°
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                           910 ATCAGATTATCAT 922
```

0;

```
Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                AR054649
                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                    Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                              AR054649/c
LOCUS
                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                               RESULT 685
                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR125244/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 687
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR091415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                          쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
          PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OSS HOMO SEQUENCE (human)
PN JP 2002509721-A/1689
PN JP 2002509721-A/1689
PF 24-MAR-1999 JP 2000541291
PR 27-MAR-1999 US 60/079678
PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, PI JAMES A MCSWIGGEN
PI JAMES A MCSWIGGEN
C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AG1P29/00,
PC A6iP35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   I) bp RNA linear PAT 17-JUL-200 Method and reagent for treating diseases or conditions concerning molecule participating in Vasculogenic response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENKaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (bases 1 to 17)
Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A. Method and reagent for treating diseases or conditions concerning Patent: JP 2002509721-A 1689 02-APR-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Method and reagent for treating diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism='Homo sapiens (human)'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                             Length 17;
        linear
                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Goncerning molecule
participating in vasculogenic response
Kev
                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 5.5e+02;
1ve 0; Mismatches 1;
                                                                                                                                                                                                                               Patent: WO 03040369-A 2654 15-MAX-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
 Sequence 2654 from Patent W003040369. AX759333
                                                                                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                AX759333.1 GI:32253949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD198663.1 GI:33008433
JP 2002509721-A/1689.
Homo sapiens (human)
                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                        713 CCCAGGAGAGTGA 725
                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 92.3:
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15 CTCAGGAGAGTGA 3
                                                                                                                                                                                                                                                                                       1. .17
                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
AX759333
                                                                                                                                                                                                                                                                                       source
               DEFINITION
ACCESSION
                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD198663/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                     JOURNAL
                                                                  KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                  FEATURES
                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
```

qq

```
0
                                                                                                                                                                                                                         PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 07-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 17)
Woo,S.L.C., Smith,L.C., Cristiano,R.J., Gottchalk,S. and Sparrow,J.
Nucleic acid transporter system and methods of use
Patent: US 5994109-A 5 30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 16-MAY-2001
                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                .
                                                                                                                                                                                                                                                                                                                                        Unknow...
Unclassified.
1 (bases 1 to 17)
Monia,B.P., Freier,S.M. and Ecker,D.J.
Compositions and methods for modulating .beta.-amyloid
Patent: US 5837449-A 5 17.NOV-1998,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .,
Query Match
3.9%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                 Sequence 5 from patent US 5837449. AR054649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR091415
Sequence 5 from patent US 5994109.
AR091415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 bp
Sequence 5 from patent US 6177246.
AR125244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR091415.1 GI:10018170
                                                                                                                                                                                                                                                                         AR054649.1 GI:5980226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR125244.1 GI:14111306
                                                                            804 TCTCCTCCAACTC 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            914 GATTATCATCACC 926
                                                                                                      17 TCTCCTCGAACTC 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         832 TCTTTTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13 GATCATCATCACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 frifiricircici 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12; Conservative
```

Unknown

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                  source
C12R1:91)
            PC
PC
CC
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OC CC CC CC FH FH FH FH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 691
E08629
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                  RESULT 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                              E08628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 bp DNA linear PAT 17-JUL-2003
Regulation of repressor genes using nucleic acid molecules.
BD259360
BD259360.1 GI:33069130
JP 2002541795-A/7153.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·
                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
1 (bases) to 17)
Noo'S.L.C., Smith, L.C., Cristiano, R.J., Gottchalk, S. and Sparrow, J. Nucleic acid transporter systems
Patent: US 6177554.A 5 23-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C12P21/02, C12P21/02//A61K31/711, (C12N5/10, C12R1:91), (C12P21/02, PC
                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                     PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OS Bukaryote
PN JP 2002541795-A/7153
PD 10-DEC-2002
PF 11-ARR-2000 JP 2000611654
PR 12-APR-1999 US 60/129396
PI LAWRENCE BLATT,MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN C12N15/09, A61K38/00, A61K48/00, A61P43/00, A61K38/10, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 17)
Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
Regulation of repressor genes using nucleic acid molecules
Patent: JP 2002541795-A 7153 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                  ;
0
     Unknown.
Unclassified.
1 (bases 1 to 17)
1 (bases). Freier, S.M. and Ecker, D.J.
Monia, B.P., Freier, S.M. and Ecker, D.J.
Compositions and methods for modulating .beta.-amyloid
Patent: US 6177246-A 5 23-JAN-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                    Query Match
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                     Sequence 5 from patent US 6177554.
AR125620.
AR125620.1 GI:14111682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              832 TCTTTTCTTCT 844
                                                                                                                                                                                                              914 GATTATCATCACC 926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                  13 GATCATCATCACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                               TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                    RESULT 688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD259360
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                       REFERENCE
                                                     AUTHORS
                                                                                                                                                                                                                                                                                                 AR125620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                          g
```

```
DNA linear PAT 29-SEP-1997 forming triple-chain DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                        PAT 29-SEP-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note='Precursor of DNA triple chain former'.
                                                Regulation of repressor genes using nucleic acid molecules FH Location/Qualifiers
(CI2P21/02,CI2R1:91), (CI2P21/02,CI2R1:91),CI2N15/00,CI2N5/00,
AG1K37/02,
(CI2N5/00,CI2R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism='Artificial sequences'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 17;
                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unclassified.

1 (bases 1 to 17)

Takaku, H. and Tsukahara, S.
FORMATION OF TRIPLE-STRAUDED DNA AND AGENT THEREFOR PATENT. IP 1995023789-A 1 27-JAN-1995;
SOUYAKU GIJUTSU KENKYUSHO:KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1; Indels
                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 5.5e+02;
ive 0; Mismatches 1;
                                                                                                                                                                                                                 Score 11.4; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 1;
                                                                                                    'organism='Eukaryote'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAKAKU HIROSHI, TSUKAHARA SATOSHI
C12N15/09,C07H21/04;
strandedness: Single;
                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .17
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                       1. .17
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 bp
Oligodeoxynucleotide capable of
E08629
                                                                                                                                                                                                                                                                                                                                                                                          17 bp
Homopyrimidine oligonucleotide.
E08628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Artificial sequences.
JP 1995023789-A/1
27-JAN-1995
05-JUL-1993 JP 1993191766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         topology: Linear;
                                                                                                                                                                                                                    3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                              E08628.1 GI:2176741
JP 1995023789-A/1.
unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                  917 TATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tririricator 13
                                                                                                                                                                                                                                                                                                     3 TAACATCACCACC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12; Conservative
                                                                                                                                                                                                                                                    12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FT
misc_feature
FT
```

```
Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown
                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                RESULT 693
130320/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 694
I46508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   146519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Under DAT 29-SEP-1997 Oligodeoxynucleotide capable of forming triple-chain DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'note='Bonded with phosphorothioate'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note='Bonded with phosphorothioate'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .17
/organism='Artificial sequences' FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'note='Bonded with phosphorothioate'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism='Artificial sequences' FT
                                                                                                                                        L LOSSES 1 to 17)

F Takahu, H. and Tsukahara, S.
FORMATION OF TRIPLE-STRANDED DNA AND AGENT THEREFOR
Retent: JP 1995023789-A 2 27-JAN-1995;
SOUTANU GIJUTSU KENKYUSHO:KK
OS None
OC Artificial sequences.
PN JP 1995023789-A/2
PD 27-JAN-1995
PP 05-JUL-1993 JP 1993191766
PI TAKAKU HROSHI, TSUKAHARA SATOSHI
PC 05-JUL-1993 JP 1993191766
PI TAKAKU HROSHI, TSUKAHARA SATOSHI
CC Strandedness: Single;
CC strandedness: Single;
CC topology: Linear;
FH Key Location/Qualifiers
FT source 1. .17
FT // Organism='Artificial sequences' F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  E 1 (bases 1 to 17)

S Takaku, H. and Tsukahara, S.
Takaku, H. and Tsukahara, S.
ToRMANITION OF TRIPLE-STRANDED DNA AND AGENT THEREFOR PORTAINTON OF TRIPLE-STRANDED DNA AND AGENT THEREFOR SOUYAKU GIJUTSU KENKYUSHO:KK

OS None

OC Artificial sequences.

PR 027-JAN-1995

PR 027-J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E08630.1 GI:2176743
JP 1995023789-A/3.
unidentified
unidentified
unclassified.
  E08629.1 GI:2176742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1^{2}
                        JP 1995023789-A/2.
unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       832 TCTTTTCTTCTC 844
                                                                                                                                (bases 1 to 17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 rrrrrrrrrrrrrrr 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         misc_feature
FT
                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                           TITLE
JOURNAL
                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 692
E08630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
VERSION
                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
0
                                                                                                                                                                                                                                                                                PAT 06-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 17)
Yang, Y.-S., Tucker, P.W. and Capra, J. Donald.
Construction of recombinant DNA by exonuclease recession
Patent: US 5580759-A 6 03-DEC-1996;
Location/Qualifiers
                                                                                                                           ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.

1 (bases 1 to 17)

Misubashi, M. and Cooper, A.

Mitod for detecting polynucleotides with immobilized polynucleotide probes identified based on T.sub.m

Patent: US 5639612-A 487 17-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
                                                                                          Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; iive 0; Mismatches 1; Indels
                                                                                                                          Indels
                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                    Score 11.4; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     146508 17 bp D Sequence 487 from patent US 5639612. 146508 146508.1 GI:2470473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                       Sequence 6 from patent US 5580759.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned DNA"
1. .17
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="unknown"
                                                                                      3.9%;
                                                                                                                                                                                                                                                                                                                         I30320.1 GI:1821111
                                                                                                                                                    832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    920 CATCACCACCACC 932
                                                                                                 Best_Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                    1 Tritricircici 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                710 AGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 CACCACCACCACC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AGTCCCAGGAGCG 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
```

```
3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  826 TGTGTCTCTTTC 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    826 TGTGTCTTTTC 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTCTCTGAAGAC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rererererinee 16
                                                                                                             4 CTTCTCTGAGGAC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                          Conservative
                                                                                                                                                                                                                                                        Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR192234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
Unknown.
                                                                                                                                                                                                                                         Unknown
                                                          12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4
                                                                                      838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 700
AR192234
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 699
AR189930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                            Matches
                                                                                                                                                    RESULT 698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                  AR189929
                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                       à
                                                                                                             dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                              PAT 07-0CT-1997
PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
Unclassified.
I (bases 1 to 17)
Pavob.P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Pavob.P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 2068 12-FEB-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mitsuhashi, M. and Cooper, A. Mitsuhashi, M. and Cooper, A. Method for detecting polynucleotides with immobilized polynucleotide probes identified based on T.sub.m Patent: Uccation/Qualifiers
                                                                                      Unclusified.
Unclassified.
1 (bases 1 to 17)
Mitsuhashi, M. and Cooper, A.
Method for detecting polynucleotides with immobilized polynucleotide probes identified based on T.sub.m.
Patent: US 5639612-A 498 17-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 17;
                                                                                                                                                                                                                                  3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                  linear
 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 5.5e+02;
tive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 bp DNA
Sequence 2068 from patent US 6346398.
AR186580
                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                17 bp D
Seguence 499 from patent US 5639612.
14 519 17 bp D.
Sequence 498 from patent US 5639612.
146519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                           /mol_type="unassigned DNA"
                                                                                                                                                                                                 /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR186580.1 GI:20232545
                                                                                                                                                                                                                                                                                                                                                                                                             146520.
146520.1 GI:2470485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          710 AGTCCCAGGAGAG 722
                                          I46519.1 GI:2470484
                                                                                                                                                                                                                                                                                         710 AGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 AGTCGCAGGAGAG 13
                                                                                                                                                                                                                                                                                                           1 AGTCGCAGGAGAG 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                    Unknown
                                                                                 Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                          VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                          RESULT 696
146520
                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 697
                 DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR186580
                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                             à
```

```
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 20-APR-2002
                                                                                                             ö
                                                                                                                                                                                                                                                                                                                 PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
Unknown.
Unclassified.
Unclassified.
I (bases I to 17)

1 avec, P., McSwiggen, J., Stinchcomb, D. and Escobedo, J.
Pavco, P., McSwiggen, J. Stinchcomb, D. and Escobedo, J.
Rethod and reagent for the treatment of diseases or conditions
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
related to levels of vascular endothelial growth factor receptor
Patent: US 6346338-A $418 12-FEB-2002;
Patent: US cation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 17)
Pavco, P., McSwiggen, J., Stinchcomb, D. and Escobedo, J.
Pavco, P., McSwiggen, G., Stinchcomb, D. and Escobedo, J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 5117 12-FEB-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 5.5e+02;
cive 0; Mismatches 1;
                                                                 Score 11.4; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 5418 from patent US 6346398. AR189930
                                                                                                                                                                                                                                                                                                        17 bp DN Sequence 5417 from patent US 6346398. AR189929 AR189929.1 GI:20235894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
/mol_type="unassigned DNA"
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR189930.1 GI:20235895
```

ó

```
/mol_type="unassigned RNA"
                                                                                           776 TGAGGCAGCCCC 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         857 CIGGCICCAGITG 869
                                       Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        857 CIGGCICCAGIIG 869
                                                                                                                      13 TGAGCGCAGCCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13 crescreckerre 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 crecerecaerre
                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                          AR286035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                         Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR323211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                              RESULT 703
AR286035/c
                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 704
AR286322/c
                                                                                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR323211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                           SOURCE
                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                     ·.
                                                                                                                                                                                                                                                                                                                                                                                         PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 10-APR-2003
                                                                                          1 (bases 1 to 17)
Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 7722 12-FEB-2002;
                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                    .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                   Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 17)
Beigelman, L., Burgin, A., Beaudry, A., Karpeisky, A., Matulic-Adamic, J., Sweedler, D. and Zinnen, S. Syntheric ribonucleic acids with RNAse activity Patent: US 6528640-A 395 04-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 17)
Beigelman, L., Burgin, A., Beaudry, A., Karpeisky, A., Matulic-Adamic, J., Sweedler, D. and Zinnen, S. Syntheric ribomucleic acids with RNAse activity Patent: US 6528640-A 396 04-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 5.5e+02;
ative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RNA
Sequence 7722 from patent US 6346398.
                                                                                                                                                                                                                                                                                                                                                                                   Sequence 395 from patent US 6528640.
AR286023
                                                                                                                                                                                          /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 396 from patent US 6528640.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="unassigned RNA"
                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unknown"
                            GI:20238199
                                                                                                                                                                                                                                                                                                                                                                                                                        AR286023.1 GI:29723619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR286024.1 GI:29723620
                                                                                                                                                                                                                                  3.9%;
                                                                                                                                                                                                                                                                                     838 CTTCTCTGAAGAC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    776 TGAGGGCAGCCCC 788
                                                                                                                                                                                                                                                                                                              crrcrcaageac 16
                                                                                                                                                                                                                                                             12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGAGCGCAGCCCC 3
                                                                  Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.
                          AR192234.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 12; Conserv
                                                 .
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15
                                                  SOURCE
ORGANISM
                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Source
 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                  AR286023/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                          AUTHORS
TITLE
              ACCESSION
VERSION
                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                             REFERENCE
                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                       RESULT 701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR286024/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                             ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
```

```
PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                              l (bases 1 to 17)
Beigelman, L., Burgin, A., Beaudry, A., Karpeisky, A., Matulic-Adamic, J., Sweedler, D. and Zimnen, S.
Syntheric ribonucleic acids with RNAse activity
Patent: US 6528640-A 407 04-MAR-2003;
                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Dictassiles.

Beigelman, L., Burgin, A., Beaudry, A., Karpeisky, A., Matulic-Adamic, J., Sweedler, D. and Zinnen, S. Synthetic ribonucleic acids with RNAse activity Patent: US 6528640-A 694 04-MAR-2003;
                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
Score 11.4; DB 1;
Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 5.5e+02;
trive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RNA
                                                                                                                                                                                             7 bp RN
6528640.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 694 from patent US 6528640. AR286322.1 GI:29723918
                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR323211
Sequence 613 from patent US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1...17
/organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                      Sequence 407 from patent US
AR286035
                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                         AR286035.1 GI:29723631
3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%;
```

ö

```
Unknown.
                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                     Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                         12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                              826
    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR326877/c
                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loc
Matches
                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR327519
                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                     RESULT 70:
AR326105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                               à
                                                                                         q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 17-AUG-2003
                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                       PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 656127-A 2317 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.

1 (bases 1 to 17)

1 (bases 1 to 17)

2 w. McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.

Method and reagent for the treatment of diseases or conditions

Method and reagent for the account of diseases or conditions

related to levels of vascular endothelial growth factor receptor

related to levels of vascular endothelial growth factor receptor

Patent: US 6566127-A 2316 20-MAY-2003;

Location/Qualifiers
                                                  Unknown.
Unknown.
Unclassified.
I (bases to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Rethod and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 613 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4; DB 1; Length 17; Pred. No. 5.5e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                             Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                             Score 11.4; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     bp RNA
6566127.
                                                                                                                                                                                                                                                                                                                                                                                             RNA
                                                                                                                                                                                                                                                                                                                                                                                           17 bp RN
US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                      /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2317 from patent AR324915
AR324915.1 GI:33710723
                                                                                                                                                                                                                                                                                                                                                                                             AR324914
Seguence 2316 from patent
AR324914
                                                                                                                                                                                                                                                                                                                                                                                                                                      AR324914.1 GI:33710722
             GI:33709019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%;
                                                                                                                                                                                                                                Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  826 TGTGTCTTTTC 838
                                                                                                                                                                                                                                                                                        838 CTTCTCTGAAGAC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4 rererererinee 16
                                                                                                                                                                                                                                                                                                         CTTCTCTGAGGAC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
.-hec 12; Conserve
AR323211
AR323211.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR324915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 707
                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                   RESULT 706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                               AR324914
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR324915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                        REFERENCE
                                                                                                       AUTHORS
                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                              ð
```

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 17-AUG-2003
                                       ô
                                                                                                                                                                                                                               PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
Unknown.
Unclassified.
I (bases Lo 17)
Pavco, P., McSuiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Pavco, P., McSuiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Rethod and reagent for the treatment of diseases or conditions
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 4279 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                              Unclassified.

Unclassified.

I (bases 1 to 17)

Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.

Pavco, P., McSwiggen, T.A., Stinchcomb, D.T. and Escobedo, J.

Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 656127-A 3507 20-MAY-2003;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 11.4; DB 1; Length 17; pred. No. 5.5e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                           Indels
  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 5.5e+02;
rative 0; Mismatches 1;
Score 11.4; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR327519 17 bp RNA
Sequence 4921 from patent US 6566127.
AR327519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 bp RNA
Sequence 4279 from patent US 6566127.
AR326877
                                                                                                                                                                                                                               AR326105
Sequence 3507 from patent US 6566127.
AR326105
AR326105.1 GI:33711913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR326877.1 GI:33712685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%;
    3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     836 TICTICTCTGAAG 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             838 CTTCTCTGAAGAC 850
                                                                                        TGTGTCTCTTTTC 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTCTCTGAGGAC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9
Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCTTCTTTGAAG 5
                                                                                                                               rererereriase 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                            Best Local Similarity
```

```
AR328076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                                                                       Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
          Query Match
Best Local S
Matches 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 714
AR328076/c
                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 715
AR398013/c
LOCUS
                                                                                                                                     RESULT 713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                      AR327895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                      SOURCE
                                                                   à
                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                              PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 17-AUG-2003
                                                   Unclassified.

1 (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Method and reagent for the treatment of diseases or conditions
Method and reagent for the treatment of diseases Pacent or Selated to levels of vescular endothelial growth factor receptor
Patent: US 6566127-A 4921 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Theres 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Pavco,P., McSwiggen, for the treatment of diseases or conditions
Method and reagent for the treatment of diseases or conditions
Felated to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 4922 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.

1 (bases 1 to 17)

1 (bases 1 to 17)

2 McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.

Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor

Ratent: US 6566127-A 5241 20-MAY-2003;

Location/Qualifiers
                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                           bp RNA
6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 bp RN
US 6566127.
                                                                                                                                                                                      /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
/wol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                           AR327520
Sequence 4922 from patent US
                                                                                                                                                          1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 5241 from patent
AR327839
    GI:33713327
                                                                                                                                                                                                                                                                                                                                                                                                 AR327520
AR327520.1 GI:33713328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR327839.1 GI:33713647
                                                                                                                                                                                                                               92.3%;
                                                                                                                                                                                                                  3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTCTCTGAAGAC 850
                                                                                                                                                                                                                                                                                       12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTCTCTGAGGAC 15
                                                                                                                                                                                                                                                                     838 CTTCTCTGAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 12; Conserv
 AR327519.1
                                                                                                                                                                                                                                                                                                                                                                        AR327520
                       .
Unknown.
                                          Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR327839
                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  838
                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                      REFERENCE
                                                                                     AUTHORS
                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR327839/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                         RESULT 71:
AR327520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
VERSION
                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
·;
                                                                                                                                                                                                               PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 5.297 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.

1 (bases 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 5478 20-MAY-2003;
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
 Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4; DB 1; Length 17; Pred. No. 5.5e+02;
                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AK328076
Sequence 5478 from patent US 6566127.
                                                                                                                                                                                               AR327895
Sequence 5297 from patent US 6566127.
AR327895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .17
/organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR398013
Sequence 394 from patent US 6617438.
AR398013
AR398013.1 GI:40135480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
                                                                                                                                                                                                                                                             AR327895.1 GI:33713703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:33713884
7. Match 3.9%;
Local Similarity 92.3%;
les 12; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%;
                                                                        892 TACTTCTCAGCTT 904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       861 CTCCAGTTGGAAC 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        861 CTCCAGTTGGAAC 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            s crccagrideakc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4
                                                                                                           17 Trcrrcrcagerr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTCCAGATGGAAC
                                                                                                                                                                                                                                                                                                                                          Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR328076.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
VERSION
```

ö

Gaps

```
PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.

1 (bases 1 to 17)

Akhtar,S., Fell,P. and McSwiggen,J.A.
Enzymatic nucleic acid treatment of diseases of conditions related to levels of epidermal growth factor receptors

Patent: US 6623962-A 134, 23-SEP-2003;
                                                                                                                                              PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
             ;
                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                Deigelman, L., Burgin, A.B., Beaudry, A., Karpeisky, A., Matulio-Adamic, J., Sweedler, D. and Zinnen, S. Oligoribonucleotides with enzymatic activity Patent: US 6617438-A 693 09-SEP-2003; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                               linear
             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 5.5e+02;
cive 0; Mismatches 1;
Pred. No. 5.5e+02;
); Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 bp Dl Sequence 336 from patent US 6623962. AR401996.1 GI:40149446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 bp Di
Sequence 134 from patent US 6623962.
                                                                                                                                              AR398312 17 bp R1
Sequence 693 from patent US 6617438.
AR398312
AR398312.1 GI:40136023
                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .17
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR401794
AR401794.1 GI:40149244
   92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      717 GGAGAGTGACTCT 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          857 CTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 GGAGAGTGAGTCT 4
                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Creecrecaerre 1
               12; Conservative
                                                           16 CTGGCTGCAGTTG 4
                                                                                                                                                                                                                                          Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 12; Conserv
   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
                                               857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 719
AR401794/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 720
                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                     RESULT 718
AR398312/c
                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR401996
                  Matches
                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                ð.
                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 18-DEC-2003
                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                             PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
Unclassified.

1 (Dases 1 to 17)

Beighann, L., Burgin, A.B., Beaudry, A., Karpeisky, A.,
Batulic-Adamic, J., Sweedler, D. and Zinnen, S.
Oligoribonuclectides with enzymatic activity
Patent: US 6617438-A 395 09-SEP-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.

1 (bases 1 to 17)

Beigelman, L., Burgin, A.B., Beaudry, A., Karpeisky, A., Matulic-Adamic, J., Sweedler, D. and Zinnen, S.
Oligoribonucleotides with enzymatic activity
Patent: US 6617438-A 406 09-SEP-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                    Unclassified.

1 (bases 1 to 17)
Beigelhan, L., Burgin, A.B., Beaudry, A., Karpeisky, A., Matulic-Adamic, J., Sweedler, D. and Zinnen, S.
Oligoribonucleotides with enzymatic activity
Patent: US 6617438-A 394 09-SBP-2003;
                                                                                                                                                                                                                Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 3.9%; Score 11.4; DB 1;
1 Similarity 92.3%; Pred. No. 5.5e+02;
12; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp Ri
Sequence 406 from patent US 6617438.
AR398025.
AR398025.1 GI:40135502
                                                                                                                                                                                                                                                                                                                                                                        Sequence 395 from patent US 6617438.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unknown"
/wol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unknown"
/wol_type="unassigned RNA"
                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                            1. .17
/organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                        AR398014.1 GI:40135482
                                                                                                                                                                                                                   3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        776 TGAGGGCAGCCCC 788
                                                                                                                                                                                                                                                                           776 TGAGGCAGCCC 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13 reaccecacece 1
                                                                                                                                                                                                                    Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                            ||||| |||||||||
15 TGAGCGCAGCCCC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                          Unknown.
                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                 AR398014/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR398025/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 717
                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                      RESULT 716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                       REFERENCE
                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
             KEYWORDS
                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                à
```

0

Gaps

·.

Gaps

```
.17
                                                                                                                     Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX215333
                                                                                                      Query Match
             source
                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                            AX214835/c
                                                                                                                                                                                                                                            RESULT 723
                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX215333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                            ô
                                          1 (bases 1 to 17)
Akhtar,S., Fell,P. and McSwiggen,J.A.
Brzymatic nucleic acid treatment of diseases of conditions related to levels of epidermal growth factor receptors
Patent: US 6623962-A 336 23-SEP-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                   PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Blatt,L., Mcswiggen,J. and Chowrira,B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 169 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
McSwiggen, James (US) ; Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nogo gene expression
Patent: WO 015103-A 168 16-AUG-2001;
RIBOZYME PHARMCEUTICALS, INC. (US); Blatt, Lawrence
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/noTe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RNA
                                                                                                                                                                                                                                                                                                                                                                         AX214726 17 bp 1
Sequence 168 from Patent W00159103.
AX214726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 169 from Patent W00159103. AX214727
                                                                                                                                                                       /mol_type="genomic DNA"
                                                                                                                                                         /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                        AX214726.1 GI:15524769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX214727.1 GI:15524770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       artificial sequences.
                                                                                                                                                                                                                                                               800 GAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
                                                                                                                                                                                   Query Match
Best Local Similarity 92.3.
These 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                             4 GAGATCTCCTCCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   839 TICTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTTTCTGAAGACA 4
                             Unclassified.
Unknown.
                                                                                                                                        source
             ORGANISM
                                                                                                                                                                                                                                                                                                                                                         AX214726/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX214727/c
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                            RESULT 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                           REFERENCE
                                                          AUTHORS
                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
0
                                                                                                                                                                                                                                                                                                                                          PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Blatt,L., Mcswiggen,J. and Chowrira,B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 277 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                     .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ٠,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lawrence (US)
                                                                                                      Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    nogo gene expression
Patent: WO 0159103-A 775 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt,
McSwiggen, James (US); Chowrira, Bharat M. (
Location/Qualifiers
organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RNA
                 /mol_type="unassigned_RNA"
/db_xref="taxon:32630"
/note="Nucleic_Acid"
                                                                                                                                                                                                                                                                                                                                    AX214835
Sequence 277 from Patent W00159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX215333 17 bp 1 Sequence 775 from Patent W00159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                         AX214835
AX214835.1 GI:15524878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX215333.1 GI:15525376
                                                                                                ch 3.9%;
1 Similarity 92.3%;
12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                   839 TTCTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      719 AGAGTGACTCTGG 731
                                                                                                                                                                                                                           15 TTTTCTGAAGACA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14 AGAGTGACTCTTG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
```

```
RESULT 729
AX215708/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 728
AX215696/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
                                             DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                           source
        RESULT 727
AX215609/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                    ORGANISM
                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                          KEYWORDS
                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 07-SEP-2001
            0
                                                                                                                                    PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent w0 0159103-A 1050 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Chowrira, Bharat M. (US)
McSwiggen, James (US); Chowrira, Bharat M. (US)
                                                                                                                                                                                                                                                        Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 776 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US); McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
0
               ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 11.4; DB 1; Length 17; Pred. No. 5.5e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                       linear
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                        /organism="synthetic construct"
/mol type="unassigned RNA"
/db_xref="taxon:32630"
/nofe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RNA
                                                                                                                                         RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 1050 from Patent WO0159103. AX215608.1 GI:15525651
                                                                                                                                  Sequence 776 from Patent W00159103.
AX215334
                                                                                                                                                                                AX215334.1 GI:15525377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                            synthetic construct
synthetic construct
artificial sequences.
    92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          839 ITCICICICAAGACA 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    926 CACCACCTTCCAG 938
                                            926 CACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 TTTTCTGAAGACA 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTCCACCTCCAG 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.95
Query Match
Best Local Similarity 92.35
Matches 12; Conservative
                                                                  2 CTCCACCTCCAG 14
                  12; Conservative
     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 726
AX215608/c
LOCUS
                                                                                                                                                      DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                  Matches
                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                RESULT 72
AX215334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                               à
                                                                         셤
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 07-SEP-2001
    PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
patent: WO 0159103-A 1138 16-AUG-2001;
RIBOZYME PARAMACEUTICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
                                                                                                                                                                               Blatt,L., Mcswiggen,J. and Chowrira,B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                        nogo gene expression
Patent: WO 0159103-A 1051 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US)
McSwiggen, James (US) ; Chowrira, Bharat M. (US)
Location/Oualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/nofe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                        1..17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="teaxon:32630"
/note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1150 from Patent WO0159103. AX215708.1 GI:15525751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp R2 Sequence 1138 from Patent W00159103. AX215696
Sequence 1051 from Patent WO0159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX215696.1 GI:15525739
                                                                   AX215609.1 GI:15525652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
synthetic construct
artificial sequences.
                                                                                                                              synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        972 CTAAAICTGGIGT 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        839 TTCTCTGAAGACA 851
                                                                                                            synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 CTAAATCTGGAGT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 TTTCTGAAGACA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
```

```
13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                source
                                                                                                                                                                                                                                                                                                          RESULT 732
AX217028/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 733
AX217072/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                   ਨੇ
                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 07-SEP-2001
                                                                        Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0153103-A 1935 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US) ;
McSwiggen, James (US) ; Chowrira, Bharat M. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                     nogo gene expression
Patent: WO 0159103-A 1150 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US) McSwiggen, James (US); Chowriza, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                          .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                      Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           i; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 5.5e+02;
live 0; Mismatches 1;
                                                                                                                                                                               1. .17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db xref="texon:32630"
/noTe="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                             RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                          AX216493
Sequence 1935 from Patent WO0159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX216746
Sequence 2188 from Patent WO0159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX216493.1 GI:15526554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX216746.1 GI:15526807
                                          artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.
              synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                  719 AGAGTGACTCTGG 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      719 AGAGTGACTCTGG 731
                                                                                                                                                                                                                                                                                                                                                                13 AGAGTGACTCTTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGTGACTCTTG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX216746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX216493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16
                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX216746/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                          AX216493/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                          REFERENCE
                                                                       AUTHORS
                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
SOURCE
CEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
              SOURCE
                                                                                                                                                                                                                                                                                                                                                            g
```

```
.;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 01595103-A 2470 16-AUG-2001;
RIBOZYME PHARAMACEUTCALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                         ٠.
nogo gene expression
Patent: WO 0159103-A 2188 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US)
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Method and the speed of the spe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                  1. .17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="teaxon:32630"
/note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="synthetic construct"
/mol type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="synthetic construct"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2470 from Patent W00159103. AX217028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX217072 17 bp R
Sequence 2514 from Patent W00159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX217028.1 GI:15527089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX217072
AX217072.1 GI:15527133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           972 CTAAAICIGGIGI 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                839 TTCTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14 CTAAATCTGGAGT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTTTCTGAAGACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 12; Conserv
```

```
||| |||||||||||
13 CCATAGAATTTTA 1
                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                         AX266203/c
LOCUS
                                                                                                                                                    KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                     source
                                                                                                        DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 737
                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                RESULT 736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX266204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dp
                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 10-SEP-2001
                                                                                                                                                                                                                                 PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk
                                                                                                                                                                                                                                                                                                                                                                Blatt,L., Mcswiggen,J. and Chowrira,B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Necessary 1) enzyme
Patent: WO 0157206-A 390 09-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Fattaey, Ali R. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                 nogo gene expression
Patent: WO 0159103-A 2530 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Blatt, Lawrence (US)
McSwiggen, James (US) ; Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                              Query Match
3.9%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="synthetic construct"
/mol_type="unassigned RNA"
/db xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/note="Nucleic Acid"
                                                                                                                                                                                                                                    RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA
                                                                                                                                                                                                                                 AX217088 17 bp R
Sequence 2530 from Patent W00159103.
AX217088 1 GI:15527149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 bp 1
Sequence 390 from Patent W00157206.
    /mol_type="unassigned RNA"
/db_xref="taxon:32630"
/note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX227018.1 GI:15556159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                           synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             972 CTAAAICTGGIGT 984
                                                                                                                             832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAAATCTGGAGT 3
                                                                                                                                            15 TCTTTTCTTCTAT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                   AX217088/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 735
AX227018/c
                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                        RESULT 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                           q
                                                                                                                                 à
```

935 CCAGAGAATTTTA 947

Š

```
..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 26-0CT-2001
PAT 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonuclectides
Patent: WO 0173002-A 3595 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                          Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: WO 0173002-A 3554 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
1. .17
/ corganism="Homo sapiens"
/ mol_type="unassigned DNA"
/ db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
3.9%; Score 11.4; DB 1;
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX266204 17 bp DNA Sequence 3595 from Patent WO0173002. AX266204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX266647 17 bp Dl
Sequence 4038 from Patent WO0173002.
AX266647
AX266203 17 bp D1 Sequence 3594 from Patent WO0173002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX266204.1 GI:16515003
                                                  AX266203
AX266203.1 GI:16515002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   882 GAGATGCACTTAC 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           882 GAGATGCACTTAC 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 GAGATGCACTTCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13 GAGATGCACTICC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 738
AX266647/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
```

```
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                 RESULT 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                      FEATURES
                                                                                                                                                                                                                                                                                               AX422539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX422540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 26-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 18-JUN-2002
                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Mclaughlin,F.G. and Randi,A.M.
                                                                                                    Kmiec, E.B., Gamper, H.B. and Rice, M.C.
Targeted chromosomal genomic alterations with modified single stranded oligonuclectides
Patent: Wo 0173002-A 4038 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kmiec, E.B., Gamper, H.B. and Rice, M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: WO 0173002.A 4039 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                      Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4; DB 1; 92.3%; Pred. No. 5.5e+02; ttive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 4039 from Patent WO0173002. AX266648
                                                                                                                                                                                                  1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 874 from Patent W00188124.
                                                                                                                                                                                  Location/Qualifiers
AX266647.1 GI:16515446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX266648.1 GI:16515447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX422538.1 GI:21525920
                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                  799 AGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    799 AGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 92.3%
The 12; Conservative
                                                                                                                                                                                                                                                                                                                                                AGAGATCTCCTCC 15
                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  m
                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
DEFINITION
ACCESSION
VERSION
                                           ORGANISM
                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                       REFERENCE
                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                        AX266648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX422538
 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
Method and reagent for the inhibition of erg
Patent: WO 0188124-A 874 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Mclaughlin,F.G. a
Randi,A.M.
Method and reagent for the inhibition of erg
Patent: WO 0188124-A 875 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Mclaughlin, F.G. an Randi, A.M.
Method and reagent for the inhibition of erg
Patent: WO 0188124-A 876 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                 Score 11.4; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                          RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RNA
                                                                                                                                  /mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 875 from Patent WO0188124.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX422540
Sequence 876 from Patent WO0188124.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                           /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX422539.1 GI:21525921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX422540.1 GI:21525922
                                                                                                                                                                                          3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                  926 CACCACCTTCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               926 CACCACCCTCCAG 938
                                                                                                                                                                                                                                                                                                             5 CCCCACCTCCAG 17
                                                                                                                                                                                            Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 ccccaccrccag 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX422540
```

```
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX475569.1 GI:22214854
                                                                AX469671.1 GI:21901843
                                                                                           synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 789 TCTGGTGCCAAGA 801
                                                                                                                                                                                                                                                                                                                                                                    826 TGTGTCTCTTTC 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 TTTGGTGCCAAGA 14
                                                                                                                                                                                                                                                                                                                                                                                            14 rerererereres
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX475570
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                       source
RESULT 745
AX469671/c
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 747
                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 746
                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX475569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 18-JUN-2002
                             ö
                                                                                                                                                     PAT 18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                         and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Mclaughlin, F.G. a Randi, A.M.
Method and reagent for the inhibition of erg
Patent: WO 0188124-A 1584 22-NOV-2001,
RIBOZYME PHARNACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                               Gaps
                                                                                                                                                                                                                                                                                       Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Mclaughlin, F.G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .,
0
                             .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 11.4; DB 1; Length 17; pred. No. 5.5e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
  Score 11.4; DB 1; Length 17; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                       linear
                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA
                                                                                                                                                        RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX423248 17 bp Rh
Sequence 1584 from Patent W00188124.
AX422248 AX423248.1 GI:21526630
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned_RNA"
/db_xref="taxon:9606"
                               0; Mismatches
                                                                                                                                                 17 bp 1
Sequence 877 from Patent WO0188124.
AX422541.
AX422541.1 GI:21525923
                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%;
    Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          816 CAGGGTTGGCTGT 828
                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   926 CACCACCCTCCAG 938
                                                           926 CACCACCCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGATTGGCTGT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCCACCCTCCAG 13
                                                                             2 CCCCACCTCCAG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 744
AX423248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                      DEFINITION
                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                RESULT 743
                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                          AX422541
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                       g
                                                              \overset{\sim}{5}
```

```
·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
PAT 16-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                             1..17
/organism="synthetic construct"
/mol_type="unassigned DNA"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="PCR primer used in the construction of the yeast and the G alpha transplants"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
3.9%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                          Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zhang,J.

Human kidney tumor overexpressed membrane protein 1

Patent: WO US A 790 28-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Indels
      linear
                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
3.9%; Score 11.4; DB 1;
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp 1
Sequence 791 from Patent W00224750.
AX475570.
AX475570.1 GI:22214855
                                                                                                                                                                         Davey,J.
Yeast-based assay
Patent: WO 0246369-A 37 13-JUN-2002;
Septegen Limited (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX475569 17 bp I Sequence 790 from Patent W00224750.
AX475569

    1.17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

17 bp
Sequence 37 from Patent WO0246369.
AX469671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
```

```
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                  DEFINITION
                                                                                                                                                        RESULT 750
                                                                                                                                                                        AX499146/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 751
AX499147/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 752
                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                              PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                          Bukaryota; Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                         Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                             linear
                         Zhang,J.
Human kidney tumor overexpressed membrane protein
Patent: WO 0224750-A 791 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   i; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human testis expressed patched like protein
Patent: BP 1229046-A 451 07-AUG-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human testis expressed patched like protein
Patent: EP 1229046-A 452 07-AUG-2002;
Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                    1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                        17 bp
Sequence 451 from Patent EP1229046.
AX499144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned_DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX499145 Squence 452 from Patent EP1229046. AX499145. GI:23381438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                   AX499144.1 GI:23381437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                   789 TCTGGTGCCAAGA 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781 GCAGCCCCTCTGG 793
                                                                                                                                                                                                                                                             1 TTTGGTGCCAAGA 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 GCAGCCCCTCTAG 5
                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zhan, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zhan,J.
                                                                                                                                                                                                                                                                                                                      AX499144/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                        RESULT 748
                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
             REFERENCE
                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX499145/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dp
```

```
ö
                                                                                                                                                                                                                    PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·.
                                                                                                                                                                                                                                                                                                               Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                             ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·
0
                  3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
3.9%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                       Jana, J.
Human testis expressed patched like protein
Patent: EP 1229046-A 453 07-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zhan,J.
Human testis expressed patched like protein
Patent: EP 1229046-A 454 07-AUG-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                DNA
                                                                                                                                                                                              AX499146 17 bp I
Sequence 453 from Patent EP1229046.
AX499146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 454 from Patent BP1229046.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                         Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                              AX499146.1 GI:23381439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX499147.1 GI:23381440
Homo sapiens (human)
                                                                                     781 GCAGCCCCTCTGG 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781 GCAGCCCCTCTGG 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781 GCAGCCCCTCTGG 793
                                                                                                           16 GCAGCCCCTCTAG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15 GCAGCCCTCTAG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14 GCAGCCCCTCTAG 2
```

```
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                           AX530695.1 GI:25253197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92.3%;
                                                                                                                                       Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              739 ACTIGGIAGGGIC 751
                                                                                                                                                                                                739 ACTIGGIAGGIC 751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 ACATGGTAGGGTC 2
                                                                                                                                                                                                                          15 ACATGGTAGGGTC 3
                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Shannon, M.
Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 756
AX530696/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                       AX530695/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                         RESULT 755
                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                             엄
                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                  ö
                PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                      Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human posh-like protein 1
Patent: EP 1239051-A 202 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                           Human posh-like protein 1
Patent: BP 1239051-A 201 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 bp I
EP1239051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                             organism="Homo sapiens"
|mol_type="unassigned DNA"
|db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp 1
Sequence 202 from Patent EP1239051.
AX530693
AX530692 17 bp 1
Sequence 201 from Patent EP1239051.
AX530692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 203 from Patent
AX530694
AX530694.1 GI:25253195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX530693.1 GI:25253193
                                                              AX530692.1 GI:25253191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                739 ACTTGGTAGGGTC 751
                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                  739 ACTIGGIAGGIC 751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 ACATGGTAGGGTC 4
                                                                                                                                                                                                                                                                                                                                                                                              17 ACATGGTAGGGTC 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Shannon, M.
                                                                                                                                                                 Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX530694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 754
AX530694/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 753
AX530693/c
LOCUS
                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                  DEFINITION
        AX530692/c
                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                            JOURNAL
                                                 ACCESSION
                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                          FEATURES
                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                               ద
```

```
PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                           PAT 22-NOV-2002
                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; lve 0; Mismatches 1; Indels
                                                                                                                                                                           Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human posh-like protein 1
Patent: BP 1239051-A 205 11-SEP-2002;
Aeomica, Inc. (US).
Location/Qualifiers
Human posh-like protein 1
Patent: EP 1239051-A 203 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human posh-like protein 1
Patent: EP 1239051-A 204 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 bp 1
Sequence 205 from Patent EP1239051.
AX530696 1 GI:25253199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                       17 bp 1
Sequence 204 from Patent EP1239051.
AX530695
                                                                             1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                      0; Mismatches
```

```
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                             Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shannon, M.
                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                     RESULT 760
AX532446/c
                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
ORGANISM
                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 761
AX532447/C
       DEFINITION
                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                   0;
                                                                                                                                      PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                   .,
                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                           Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
 Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human posh-like protein 1
Patent: EP 1239051-A 1953 11-SEP-2002;
Acomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                   Human posh-like protein 1
Patent: EP 1239051-A 1120 11-SEP-2002;
                                                                                                                                 17 bp DN Sequence 1120 from Patent EP1239051. AX531611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX532444 Sequence 1953 from Patent EP1239051.
                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                              Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                           AX531611.1 GI:25255012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX532444
AX532444.1 GI:25256662
92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                            3.9%;
                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                748 GGTCCCAGGGTCC 760
                                          739 ACTIGGTAGGGTC 751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     920 CATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                        3.9%
Dest Local Similarity 92.3%
Matches 12; Conservative
               12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 GGGCCCAGGGTCC 13
                                                                   13 ACATGGTAGGGTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATCTCCACCACC 5
                                                                                                                                                                                                                     Homo sapiens
    Best Local Similarity
                                                                                                                                                                                                                                                                        Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 758
AX532444/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                DEFINITION
ACCESSION
                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 759
AX532445/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
               Matches
                                                                                                          RESULT 757
                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                      AX531611
LOCUS
                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
```

PAT 22-NOV-2002

linear

DNA

17 bp

AX532445

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        · 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 22-NOV-2002
                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                     ch 3.9%; Score 11.4; DB 1; Length 17; ll Similarity 92.3%; Pred. No. 5.5e+02; 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                 Human posh-like protein 1
Patent: EP 1239051-A 1954 11-SEP-2002;
Acomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human posh-like protein 1
Patent: BP 1239051-A 1955 11-SEP-2002;
Acomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1955 from Patent EP1239051. AX532446.1 GI:2525666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 bp DN Sequence 1956 from Patent EP1239051.
AX532447
Sequence 1954 from Patent EP1239051.
AX532445
                                                                                                                                                                                                                                                                                                              1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shannon, M.
Human posh-like protein 1
                                             AX532445.1 GI:25256664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX532447.1 GI:25256668
                                                                                        Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         920 CATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             920 CATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 CATCTCCACCACC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15 CATCTCCACCACC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
```

ö

Gaps

·;

g

δ

```
Thompson, J., Mcswiggen, J., Mckenzie, T., Ayers, D., Szymkowski, D.E. and Grupe, A. Mcfor in the inhibition of calcium activated chloride channel—1 (clca—1) enterts wo 0211674-A 1135 14-FEB-2002; RIBOZYME PRARAGEURICALS, INC. (US); Syntex (U.S.A.) LLC (US); RIBOZYME PARAGEURICALS, INC. (US); Syntex (U.S.A.) LLC (US);
                                                                                                                                                                                                                                                                                                                                                                     Thompson, J., Mcswiggen, J., Mckenzie, T., Ayers, D., Szymkowski, D.E. and Grupe, A. Method and reagent for the inhibition of calcium activated chloride channel—1 (clca—1)
Patent: WO 02116/4-A 453 14-FEB-2002;
RIBOZYME PHARMACEUTICALS, INC. (US); Syntex (U.S.A.) LLC (US);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 10-JAN-2003
                                                                                                                                                                                     PAT 10-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX579297 17 bp RNA
Sequence 1135 from Patent WO0211674.
AX579297
                                                                                                                                                                                       RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                     AX578615 17 bp F
Sequence 453 from Patent W00211674.
AX578615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Thompson, James (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX579297.1 GI:27648499
                                                                                                                                                                                                                                              AX578615.1 GI:27647817
 Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Thompson, James (US)
                                                                                                                                                                                                                                                                                 Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       814 CTCAGGGTTGGCT 826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  814 CTCAGGGTTGGCT 826
                                                          970 CTCTAAATCTGGT 982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CICAGAGITGGCI 1
                                                                                             16 crcraaarcrrer 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 765
AX579297/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                    RESULT 764
AX578615/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 23-NOV-2002
                                                                                                                                                                                           ·
0
                                                                                                                                                                                                                                                                                                                                                             PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sims,L.E.
Genes encoding novel proteins with pesticidal activity against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Abad, A.R., Duck, N.B., Feng, X., Flannagan, R.D., Kahn, T.W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1; Length 17; ilarity 92.3%; Pred. No. 5.5e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.4; DB 1; Length 17;
                                                                                                                                                    Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent: WO 0234774-A 37 02-MAY-2002;
E.I. DU PONT DE NEMOURS AND COMPANY (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="teaxon:32630"
/noTe="3' forward primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human posh-like protein 1
Patent: EP 1239051-A 1957 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
     Patent: EP 1239051-A 1956 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                             AX532448 17 bp DN Sequence 1957 from Patent EP1239051. AX532448.1 GI:25256670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 37 from Patent W00234774.
AX543960
AX543960.1 GI:25277440
                       Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   920 CATCACCACC 932
                                                                                                                                                                                                                            920 CATCACCACCACC 932
                                                                                                                                                                                                                                                      14 CATCTCCACCACC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATCTCCACCACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               coleopterans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shannon, M.
                           Aeomica,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                          RESULT 762
AX532448/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX543960/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
```

 δ g

; 0

Gaps

. 0

0;

Gaps

ö

SOURCE

KEYWORDS

REFERENCE AUTHORS source

FEATURES

JOURNAL

TITLE

DEFINITION ACCESSION VERSION AX579298/c LOCUS

RESULT

셤

PAT 13-FEB-2003

0

Gaps

0;

PAT 27-MAR-2003

0;

Gaps

. 0

PAT 27-MAR-2003

```
Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour teversion, apoptosis and/or resistance to viruses and their use as
                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                            Garcia,P., Hardy,S.F., Williams,L.T. and Escobedo,J.
Endogenous retroviruses up-regulated in prostate cancer
Patent: WO 0246477-A 186 13-JUN-2002;
CHIRON CORPORATION (US)
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1430 from Patent W003004526. AX672985 AX672985.1 GI:29331333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent: WO 03004526-A 491 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX672046 17 bp DN
Sequence 491 from Patent WO03004526.
        Sequence 186 from Patent WO0246477, AX594108
                                                                                                                                                                                                                                                                                                                  1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                   AX594108.1 GI:28375338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX672046.1 GI:29330394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%;
                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   813 ACTCAGGGTTGGC 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         909 GATCAGATTATCA 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GATCAGATTACCA 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17 ACTCAGGATTGGC 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12; Conservative
                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best_Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX672046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
          LOCUS
DEFINITION
                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
ORGANISM
                                              ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX672985/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX672046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                 Thompson, J., Mcswiggen, J., Mckenzie, T., Ayers, D., Szymkowski, D.E. and Grupe, A. Method and reagent for the inhibition of calcium activated chloride channel—1 (clca—1)
Patent: WO 0211674-A 1136 14-FEB-2002;
RIBOZYME PHARMACETICALS, INC. (US); Syntex (U.S.A.) LLC (US);
                                                                                                           PAT 10-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     o
O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Thompson, J., Mcswiggen, J., Mckenzie, T., Ayers, D., Szymkowski, D.E. and Grupe, A. Method and reagent for the inhibition of calcium activated chloride channel -1 (clca.)
Patent: WO 0211674-A 1830 14-FEB-2002;
RIBOZYME PHRANGECHICALS, INC. (US); Syntex (U.S.A.) LLC (US);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 10-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
0
                                                                                                                                                                                                                       Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 11.4; DB 1; Length 17; Pred. No. 5.5e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                       linear
                                                                                                       RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA
                                                                                                 AX579298
Sequence 1136 from Patent WO0211674.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX579992
Sequence 1830 from Patent WO0211674.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                            AX579298.1 GI:27648500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX579992.1 GI:27649194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                             Thompson, James (US)
                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Thompson, James (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     814 CTCAGGGTTGGCT 826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                814 CTCAGGGTTGGCT 826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCAGAGTTGGCT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 Crcagagrigger 4
17 CTCAGAGTIGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                             4X579298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX579992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX579992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14
```

RESULT 767 AX579992/c LOCUS

à d DEFINITION ACCESSION VERSION

ORGANISM

KEYWORDS

SOURCE

REFERENCE AUTHORS source

FEATURES

JOURNAL

TITLE

RESULT 768 AX594108/c

ð g

```
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 774
AX687512
                                                                                                                                                                                                                                                                                                                                                                     RESULT 773
AX687511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QD
                                                                                                                                                                                                                                                                                     Пр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                    1
Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour sequences involved in phenomena of tumour suppression, apoptosis and/or resistance to viruses and their use as medicines
medicines
Patent: WO 03004526-A 1430 16-JAN-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo repressible supersonate supersonate supersonate substance sub
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shannon, M., Gu, Y. and Nguyen, C.T.
Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                        Query Match

3.9%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mdz12
Patent: EP 1281758-A 242 05-FEB-2003;
Aeomica, Inc. (US)
Location/Qualifiers
1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent: EP 1281758-A 241 05-FEB-2003;
Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp | 1
Sequence 242 from Patent EP1281758.
                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp 1
Sequence 241 from Patent EP1281758.
AX687509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX687510
AX687510.1 GI:29410204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX687509.1 GI:29410203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          934 TCCAGAGAATTTT 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           977 TCTGGTGTATGGG 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5 TCCAGAGACTTT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTGGTCTATGGG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 772
AX687510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX687509
                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Db
```

source

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 31-MAR-2003
                                         ö
                                                                                                                                                                                                                      PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shannon,M., Gu,Y. and Nguyen,C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                  Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and mdz12
                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
  Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                        linear
                                             1; Indels
Score 11.4; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: EP 1281758-A 244 05-FEB-2003;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent: EP 1281758-A 243 05-FEB-2003;
Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX687512 17 bp D
Sequence 244 from Patent EP1281758.
AX687512. GI:29410206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                AX687511
Sequence 243 from Patent EP1281758.
AX687511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                    AX687511.1 GI:29410205
      7. Match 3.9%;
Local Similarity 92.3%;
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          934 TCCAGAGAATTTT 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         934 TCCAGAGAATTTT 946
                                                                                    934 TCCAGAGAATTTT 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 TCCAGAGACTTTT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ouery Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                         4 rccasasacriri 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
```

```
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX723511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
           DEFINITION
ACCESSION
                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 779
AX723511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX723286/c
                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                         VERSION
KEYWORDS
                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                   PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                              Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ative 0; Mismatches 1; Indels
                                                                                                   linear
                                                                                                                                                                                                                                                                                         medicines
Patent: WO 03025176-A 305 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     medicines
Patent: WO 03025176-A 445 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                            AX722618 17 bp Di
Sequence 305 from Patent WO03025176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX722758 17 bp Di
Sequence 445 from Patent WO03025176.
                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                          /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                       Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (house mouse)
                                                                                                                                         AX722618.1 GI:30423119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX722758.1 GI:30423259
                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               834 TITICITCIGA 846
976 ATCTGGTGTATGG 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.99
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCTGGTGTCTGG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15 rrrrcrrarcrga 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
                                                                                                                            AX722618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX722758
                                                                                                       DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX722758
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                           AX722618/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                    ORGANISM
                                                              RESULT 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 776
                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 777
                                                                                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX723188
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                               TITLE
                 a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

PAT 08-MAY-2003

linear

DNA

17 bp

AX723188

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 08-MAY-2003
                                                                                         Mus musculus
Mus musculus
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 17;
80.0%; Pred. No. 5.5e+02;
tive 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                        Patent: WO 03025176-A 875 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           metaters WO 03025176-A 973 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX723511 17 bp DNA Sequence 1198 from Patent WO03025176.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX723286 17 bp DN Sequence 973 from Patent WO03025176.
AX723286
Sequence 875 from Patent WO03025176.
AX723188
                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="Mus musculus"
                                                   AX723188.1 GI:30423689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX723286.1 GI:30423787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX723511
AX723511.1 GI:30424012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     858 TGGCTCCAGTTGGAA 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |||:| |||||| |
17 TGGMTGCAGTTGGGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           974 AAATCTGGTGTAT 986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5 AAAACTGGTGTAT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
SOURCE
ORGANISM
```

```
Mus musculus
                                                                                                                                                                                                       7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                     AX724296/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                 source
                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                         RESULT 782
                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX724423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        쇰
                                                                                                                                                                             ð
                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 08-MAY-2003
                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                       PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus
Mus musculus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mus musculus
Mus musculus
Eukaryota, Metazoa, Chordata, Craniata; Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Musinae, Mus
dammalia; Eutheria; Rođentia; Sciurognathi; Muridae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                               Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 17;
                                                                                                                                                                                                                           Score 11.4; DB 1; Length 17; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                medicines
Patent: WO 03025176-A 1404 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 03025176-A 1868 27-MAR-2003;
                                                                                             Patent: WO 03025176-A 1198 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX724181 17 bp DNA Sequence 1868 from Patent WO03025176.
                                                                                                                                                                                                                                                                                                                                                                                                       AX723717 17 bp DNA Sequence 1404 from Patent WO03025176.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                            /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX724181.1 GI:30503524
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX723717.1 GI:30503060
                                                                                                                                                                                                                                3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             751 CCCAGGGTCCCTA 763
                                                                                                                                                                                                                                                                                              806 TCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        s cécadedrécera 17
                                                                                                                                                                                                                                                                                                                            rccracaacrcag 15
                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX724181
                                                                                                                                                                                                                                                                                                                            ٣
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                              RESULT 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                           AX723717
LOCUS
                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX724181
                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                            og
O
                                                                                                                                                                                                                                                                                                 ò
```

```
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 08-MAY-2003
                                                                                                                                                                                             ٥.
                                                                                                                                                                                                                                                                                                                                                                                              PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                 Score 11.4; DB 1; Length 17; Pred. No. 5.5e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       medicines
Patent: WO 03025176-A 1983 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2110 from Patent W003025176. AX724423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent: WO 03025176-A 2110 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                       17 bp DNA
Sequence 1983 from Patent WO03025176.
AX724296
AX724296.1 GI:30503639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                              /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .17
/organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX724423.1 GI:30503766
                                                                                                                                                        0.0ery Match
Best Local Similarity 92.3%;
Matches 12; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 834 TITICITCIGA 846
                                                                                                                                                                                                                                             976 ATCTGGTGTATGG 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                         ATCTGGAGTATGG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15 rrrrcrrrcrdA 3
```

```
Query Match
                                                                               DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 787
AX725586
                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                      RESULT 786
                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX726211/c
                                                   AX725289
LOCUS
                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                    0
                                                                                                                                                                         PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 08-MAY-2003
                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                    Gaps
                                                                                                                                                                                                                                                                                                                         Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
0
 Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ttive 0; Mismatches 1; Indels
                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                 Molecular Engines Laboratories (FR)
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2924 from Patent W003025176. AX725237. GI:30504580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent: WO 03025176-A 2924 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                 Sequence 2811 from Patent WO03025176.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                               Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (house mouse)
                                                                                                                                                                                                                 AX725124.1 GI:30504467
   3.9%;
                                                            857 CTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           727 TCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840 TCTCTGAAGACAG 852
                                                                                   CTGACTCCAGTTG 16
Query Match 3.99
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 réregradraged 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                               Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                         medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  medicines
                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                       RESULT 784
                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX725237
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                       AX725124
                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
```

5 rerereaseacae 17

```
PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 08-MAY-2003
                                                                                                                                                         Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                    Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                    medicines
Patent: WO 03025176-A 2976 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
Sequence 2976 from Patent W003025176.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3273 from Patent W003025176. AX725586
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent: WO 03025176-A 3273 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX726211 17 bp DNA
Sequence 3898 from Patent W003025176.
AX726211
                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Mus musculus"
/mol_type="unassigned DNA"
/db xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .17
/organism="Mus musculus"
                                                                                                                  Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (house mouse)
Mus musculus
                                                                  AX725289.1 GI:30504632
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX725586.1 GI:30504929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                896 TCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909 GATCAGATTATCA 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5 TCTCTGCTTCTGC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 92.3°
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 GATCAGATTAACA 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                1. .17
                                                                                                                                    Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
```

Mon Jul 12 11:21:14 2004

```
Homo sapiens
                                              medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                            source
                                                                                                                                                                                                                                                                                                                               RESULT 791
AX728834
                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX728881
                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                            FEATURES
              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus
Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi;
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                           Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                   3.9%; Score 11.4; DB 1;
llarity 92.3%; Pred. No. 5.5e+02;
Conservative 0; Mismatches 1;
                                                                                                                                                                         Patent: WO 03025176-A 3898 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               medicines
Patent: WO 03025176-A 5551 27-WAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp DNA
WO03025176.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 bp DN Sequence 5551 from Patent WO03025176. AX727864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
/mol_type="unassigned DNA"
/db xref="taxon:10090"
                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
/db xref="taxon:10090"
                                                                                                                                                                                                                                      /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX727973
Sequence 5660 from Patent
AX727973
                               Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX727973.1 GI:30507316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX727864.1 GI:30507207
 AX726211.1 GI:30505554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          909 GATCAGATTATCA 921
                                                                                                                                                                                                                                                                                                                                                               874 ACTITCCTGAGAI 886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GATCAGATTACCA 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                              14 ACTTTCCTGGGAT 2
                                                                                                                                                                                                                                                                                      Ouery Match
Best Local Similarity
"...hes 12; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 790
                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX727973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX727864
                  KEYWORDS
                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                               qq
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                        3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 11.4; DB 1; Length 1 Pred. No. 5.5e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                 Parent: WO 03025176-A 5660 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent: WO 03025175-A 515 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent: WO 03025175-A 468 27-MAR-2003,
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 bp DN Sequence 515 from Patent W003025175. AX728981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman, A., Amson, R. and Tuijnder, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 468 from Patent WO03025175. AX728834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                   /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX728881.1 GI:30508224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX728834.1 GI:30508177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                            976 ATCTGGTGTATGG 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            921 ATCACCACCACCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                         Arcredacrared 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 ATCACCCCCACCC 14
                                                                                                                                                                                                                                                                                                                                               12; Conservative
                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 12; Conserva'
```

```
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .17
/organism="Homo sapiens"
0;
                                                                                                                                                                                     AX730655.1 GI:3050998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   860 GCTCCAGTTGGAA 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       921 ATCACCACCACCC 933
                              753 CAGGGTCCCTAGG 765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 ATCACCACCCCC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GATCCAGTTGGAA 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12; Conservative
                                                             16 caggercerrage 4
 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 796
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                              RESULT 795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX731605
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                           AX730655
                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                         VERSION
                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                  ð
                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 08-MAY-2003
                                                                                                              ö
                                                                                                                                                                                                                                                      PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; trive 0; Mismatches 1; Indels
                                                                             Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 03025175-A 2224 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX730590 17 bp DNA Sequence 2224 from Patent WO03025175. AX730590
                                                                                                                                                                                                                                                                                                                                                                                                                                                           medicines
Patent: WO 03025175-A 825 27-MAR-2003;
                                                                                                                                                                                                                                                17 bp Di
Sequence 825 from Patent W003025175.
AX729191.1 GI:30508534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
/db_xref="taxon:9606"
   1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX730590.1 GI:30509933
                                                                               3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                             909 GATCAGATTATCA 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 936 CAGAGAATTTTAC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 CAGAGAATTTTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 92.3'
Matches 12, Conservative
                                                                               Query Match 3.9%
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                                    1 GATCAGATTATGA 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX730590/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                         RESULT 793
                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 794
                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                        AX729191
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                            g
                                                                                                                                                à
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 08-MAY-2003
;
0
                                                                                                                                                                                                                          PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                            Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·:
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
  Indels
٦,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3239 from Patent W003025175. AX731605.1 GI:30510948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           medicines
Patent: WO 03025175-A 3239 27-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent: WO 03025175-A 2289 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                        AX730655 17 bp DNA Sequence 2289 from Patent WO03025175. AX730655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Molecular Engines Laboratories (FR) Location/Qualifiers
```

```
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 800
AX733950/c
                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX735131/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 08-MAY-2003
                                                                                                                                      Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                  Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                       ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·
0
                                                                                                                                                                                                                                                                                                                                                                    Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                           Patent: WO 03025175-A 3756 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4266 from Patent W003025175.
AX732632.
AX732632.1 GI:30511975
                            AX732122 17 bp DNA Sequence 3756 from Patent WO03025175.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 3933 from Patent W003025175. AX732299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: WO 03025175-A 3933 27-MAR-2003;
                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                         AX732122.1 GI:30511465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX732299.1 GI:30511642
                                                                                                                                                                                                                                                                                                                                                                       3.9%;
                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                952 AGAAGAGCCAAAT 964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          833 CTTTTCTTCTCG 845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5 CTTTGCTTCTCTG 17
                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.99
Best Local Similarity 92.37
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 AAAAGAGCCAAAT 5
                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                  medicines
                                                           AX732122
                                                                                                                                                                                                                                                                                               source
                                         DEFINITION
                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
              AX732122/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
RESULT 797
                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                           ACCESSION
                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX732632
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX732299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 08-MAY-2003
Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                  Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                      ch 3.9%; Score 11.4; DB 1; Length 17; 1 Similarity 92.3%; Pred. No. 5.5e+02; 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 1
92.3%; Pred. No. 5.5e+02;
tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                           medicines
Patent: WO 03025175-A 4266 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mecant: WO 03025175-A 5584 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX733950 17 bp DNA
Sequence 5584 from Patent W003025175.
AX733950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX735131 17 bp DN
Sequence 721 from Patent WO03025177.
AX735131
                                                                                                                                                                                                                                                                                           1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX733950.1 GI:30513293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX735131.1 GI:30514408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             909 GATCAGATTATCA 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  877 ITCCTGAGATGCA 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GATCAGTTTATCA 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 rrccrdadadaca 5
```

```
Homo sapiens
                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                               AX744259
                                                                                                                                                                                                                                                                                                                                                                                              Zhang, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                 RESULT 804
                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX744260
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
                                                                                                                                                                                                              AX744259
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                               g
                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 08-MAY-2003
                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                  PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177A 5102 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments Patent: WO 03025177-A 3822 27-MAR-2003; Molecular Engines Laboratories (FR)
reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A 721 Z7-WAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                ch 3.9%; Score 11.4; DB 1; Length 17; l Similarity 92.3%; Pred. No. 5.5e+02; 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                             Sequence 3822 from Patent W003025177.
AX738232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX739512 17 bp DN.
Sequence 5102 from Patent WO03025177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                    /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
                                                                                     1. 17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX739512.1 GI:30518809
                                                                                                                                                                                                                                                                                                                                                                                                  AX738232.1 GI:30517520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 955 AGAGCCAAATTGA 967
                                                                                                                                                                                                                                     809 TCCAACTCAGGGT 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 AGAGCCAAACTGA 17
                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                       Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX739512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                       RESULT 802
AX738232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX739512
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ωp
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 14-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                               ö
                                                                                                                                                                                                                                                                                PAT 14-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 11.4; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                    3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zhang,J.
A human G protein coupled receptor
Patent: WO 03031621-A 225 17-APR-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A human G protein coupled receptor
Patent: WO 03031621-A 224 17-APR-2003;
Amersham Biosciences (SV) Corp. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp DN Sequence 225 from Patent WO03031621. AX744260
                                                                                                                                                                                                                                                                                                   Sequence 224 from Patent W003031621.
AX744259
AX744259.1 GI:30722926
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                    17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX744260.1 GI:30722927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            727 TCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 727 TCTGGTCATAGGA 739
                                                                                                                                           909 GATCAGATTATCA 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.94

Best Local Similarity 92.35

Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 reregrerragga 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5 rcredrcrraeda 17
                                                                                                                                                                                 1 GATCAGATTACCA 13
                                                                                                     12; Conservative
```

```
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                       AX750818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zhang, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zhang, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                  source
                                                                                                                                                                                                                                                                                             RESULT 809
AX750818/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 810
AX750819/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
ORGANISM
           REFERENCE
AUTHORS
                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                    Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                      PAT 14-MAY-2003
                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 14-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 14-MAY-2003
                                                                                                                  Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1
Zhang,J.
A human G protein coupled receptor
Patent: WO 03031621-A 227 17-APR-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                      A human G protein coupled receptor
Patent: WO 03031621-A 226 17-APR-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                   AX744261
Sequence 226 from Patent WO03031621.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 bp DN
Seguence 227 from Patent WO03031621.
AX744262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX744263
Sequence 228 from Patent WO03031621.
                                                                                                                                                                                                                                                1. .17
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                            AX744261
AX744261.1 GI:30722928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX744262.1 GI:30722929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX744263.1 GI:30722930
                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                        727 TCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                      727 TCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 TCTGGTCTTAGGA 14
                                                                                                                                                                           Zhang, J.
                                                                                                                                                                                                                                                                                                                                                                                                  ٣
                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                           DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX744263
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                   AX744261
LOCUS
                                                                         VERSION
KEYWORDS
                                                                                                                                                           REFERENCE
                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 808
                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX744262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
```

```
·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 20~JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 20-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                          Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human gtp-activator protein for rab-like gtpase
Patent: WO 03033703-A 34 24-ARR-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human gtp-activator protein for rab-like gtpase Patent: WO 03033703-A 35 24-APR-2003; Amersham Biosciences (SV) Corp. (US) Location/Qualifiers
Zhang,J.
A human G protein coupled receptor
Patent: WO 03031821-A 228 17-APR-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX750819 17 bp E
Sequence 35 from Patent WO03033703.
AX750819.1 GI:32133147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 34 from Patent WO03033703.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                   1. .17
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX750818.1 GI:32133146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                  727 TCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              704 CCAGCGAGTCCCA 716
                                                                                                                                                                                                                                                                                                                                                           1 rcredrcrradga 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14 CCAGCGGGTCCCA 2
```

PAT 25-JUN-2003

DEFINITION ACCESSION VERSION

RESULT 811

AX758113

LOCUS

ORGANISM

REFERENCE AUTHORS

KEYWORDS SOURCE

Source

FEATURES

JOURNAL

DEFINITION

AX758239 LOCUS

ACCESSION VERSION

RESULT 812

gg

ð

Matches

ORGANISM

KEYWORDS SOURCE

REFERENCE AUTHORS TITLE

JOURNAL

FEATURES

```
linear PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                        Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9%; Score 11.4; DB 1;
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                        Patent: WO 03040369-A 1921 15-WAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent: WO 03040369-A 2161 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                          Sequence 1921 from Patent WO03040369. AX758600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX758840 17 bp DNA Sequence 2161 from Patent W003040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX761147/c LOCUS AX761147 LOCUS AX761147 DN2
DEFINITION Sequence 4468 from Patent W003040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                           AX758600.1 GI:32253216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX758840.1 GI:32253456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                       Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               920 CATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          766 CCTCCACTTCTGA 778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5 CATAACCACCACC 17
GATCAGATTATTA 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccrcaactrorga 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              medicines
                                                                                                                                                                                                                                                                                                                                                                       medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX758840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                        RESULT 813
AX758600
                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX758840/c
                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                            ö
                                                                                                                                                                                                                                                PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
Patent: WO 03040369-A 1560 15-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·
0
                                                            ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 11.4; DB 1; Length 17; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; iive 0; Mismatches 1; Indels
                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
               Query Match
3.9%; Score 11.4; DB 1;
Best Local Similarity 92.3%; Pred. No. 5.5e+02;
Matches 12; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                       Sequence 1434 from Patent W003040369. AX758113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: WO 03040369-A 1434 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1560 from Patent W003040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                          AX758113.1 GI:32252729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX758239.1 GI:32252855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     909 GATCAGATTATCA 921
                                                                                                 704 CCAGCGAGTCCCA 716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            832 TCTTTTCTTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 TCTTTTTTCTCT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12; Conservative
                                                                                                                                        13 ccAgcgggrcccA 1
                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best_Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      medicines
```

0;

Gaps

٠;

PAT 25-JUN-2003

.; 0

Gaps

; 0

Query Match

ð

```
source
                                                                                                                                                                                                                                                            SHEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FFFG
                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 818
BD067496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                 AUTHORS
TITLE
   REFERENCE
                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Encyment and linear PAT 27-AUG-2002 Enzymatic nucleic acid treatment of diseases or conditions related BD067294 BD067294 GI:22612897 DC05101003-A/134. unidentified unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                         ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 25-JUN-2003
                                                            Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                   Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines Patent: WO 03040369-A 4468 15-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                      3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 5.5e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX761941 17 bp DNA Sequence 5262 from Patent WO03040369. AX761941
                                                                                                                                                                                                                                                             /mol_type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                   Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                               /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
                                                                                                                                                                                                               Location/Qualifiers
 AX761147
AX761147.1 GI:32255763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX761941.1 GI:32256557
                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                    834 TITICITCICE 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         796 CCAAGAGCTCTCC 808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4 CCAACAGCTCTCC 16
                                                                                                                                                                                                                                                                                                        Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                      15 TTCCTTCTCTGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
                                                             ORGANISM
ACCESSION
VERSION
                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD067294/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX761941
                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                 pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
```

```
ED067496

ED067496

IO Enzymatic nucleic acid treatment of diseases or conditions related to levels of epidermal growth factor receptors.

ED067496.

ED067446.

ED067496.

ED06
Akhtarys., Fell, P. and Mcswiggen, J.A.

Bazymatic nucleic acid treatment of diseases or conditions related to levels of epidermal growth factor receptors

Bazymatic nucleic acid treatment of diseases or conditions related to levels of epidermal growth factor receptors

Batent: JP 2001511003-A 134 07-AUG-2001;

RIBOZYME PRARMACECTICALS INC, ASTON UNIV

S Unidentified

PD 07-AUG-2001

PP 14-JAN-1999 UP 1998532913

PR 31-JAN-1997 US 60/036476,04-DEC-1997 US 8AGHIR AKHTAR, PATRICIA FELL, JAMES A MCSWIGGEN PC C12N9/00, COTK14/71

CC Strandedness: Single;

CC Topology: Linear;

CC Enzymatic nucleic acid treatment of diseases or conditions CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Topology: Linear;
Enzymatic nucleic acid treatment of diseases or conditions
related to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 5.5e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Dozamari
Enzymatic nucleic acid treatment of diseases
Enzymatic nucleic acid treatment of diseases
related to
levels of epidermal growth factor receptors
Kev
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        levels of epidermal growth factor receptors Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'organism='Unidentified'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            'organism='Unidentified'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .17
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       717 GGAGAGTGACTCT 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 GGAGAGTGAGTCT 4
```

0;

```
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
FEATURES
                                                                                                                                   Matches
                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                 à
                                                                                                                                                                                           d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
O
                                 0;
                                                                                                                                                                 PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AG1P29/00,
PC A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
JP 2002509721-A/2255
02-ARR-1099
JP 200541291
27-MAR-1999 US 60/079678
PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 17-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PC
C12N15/09,A61K31/7088,A61K31/7125,A61K48/00,A61P3/10,A61P17/06, PC
                                                                                                                                                                                                                                                                              Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.

1 (2002-198-1 to 17)
Pavco, P.A., Roberts, Jarvis, T., Coeshott, C. and Mcswiggen, J.A. Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response
Patent: JP 2002509721-A 2255 02-APR-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                              BD199229 17-JUL-200 Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.
                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Method and reagent for treating diseases or conditions
                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   participating in vasculogenic response
Key
 Score 11.4; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 11.4; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 107 from patent US 6258529.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 19)
Berdoz, J. and Kraehenbuhl, J.-P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          concerning molecule
                                                                                                                                                                                                                    BD199229.1 GI:33008999
JP 2002509721-A/2255.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR161797.1 GI:16228748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JAMES A MCSWIGGEN
3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         832 TCTTTTCTTCT 844
                                                             800 GAGCICICCICCA 812
                                                                           4 GAGATCTCCTCCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.99
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 rerrrerrer 13
                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
Unclassified.
   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                          BD199229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEE
                                                                                                                                                                                                                                                                                                                                                                                                 OS
PN
PF
PR
PR
                                                                                                                                                                                                                                    KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 820
AR161797/c
                                                                                                                                 RESULT 819
BD199229
                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                 Matches
                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

```
PAT 26-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 16)
Dubensky, T.W. Jr., Polo, J.M., Belli, B.A., Schlesinger, S.,
Dryga, S.A. and Frolov, J.
Recombinant alphavirus-based vectors with reduced inhibition of cellular macromolecular synthesis
Patent: US 6451592-A 85 17-SEP-2002;
                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
PCR amplification of rearranged genomic variable regions of immunoglobulin genes
Patent: US 6258529-A 107 10-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 16)
Dubensky,T.W. T.W. T. Polo,J.M., Schlesinger,S. and Frolov,I.
Alphavirus structural protein expression cassettes
Patent: US 6426196-A 85 30-JUL-2002;
                                                                                                                                                                                                ٥:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.9%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 5.6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 16;
                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                      3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 6.1e+02;
tive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 5.6e+02;
iive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                   Sequence 85 from patent US 6426196. AR221233
                                                                                                                   /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR230660 16 bp
Sequence 85 from patent US 6451592.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .16
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                 /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                  AR221233.1 GI:23328129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR230660.1 GI:27271428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        873 CACTITCCTGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 CACGGTCCTGAGGTGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 cacgercercaserse 16
                                                                                                                                                                                                                                     721 AGTGACTCTGGTC 733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             873 CACTITICCIGAGAIGC
                                                                                                                                                                                                12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                     13 AGGGACTCTGGTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR230660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown
                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                  RESULT 821
AR221233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 822
AR230660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
```

ö

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16
                                                                                                     Best_Local
Matches 1
                                         source
                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX535772/c
LOCUS
                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                       AX349227/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                            RESULT 826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                           FEATURES
                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                   q
                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dd
                          PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 17-AUG-2003
                                                                                             Unknown.
Unclassified.
Unclassified.
I (bases 1 to 16)
Dubensky, T.W. Jr., Polo, J.M., Belli, B.A., Schlesinger, S.,
Dryga, S.A. and Frolov, I.
Recombinant alphavirus based vectors with reduced inhibition of cellular macromolecular synthesis
Patent: US 6458560-A 85 01-0cT-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 16)
Dubensky, T.W. Jr., Polo, J.M., Belli, B.A., Schlesinger, S.,
Dryga, S.A. and Frolov, I.
Recombinant alphavirus-based vectors with reduced inhibition of
cellular macromolecular synthesis
Patent: US 6466534A 85 15-OCT-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                       .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·,
                                                                                                                                                                                                                                                                         3.9%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 5.6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 5.6e+02; ative 0; Mismatches 3; Indels
                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                             AR237744 16 bp 16
Sequence 85 from patent US 6465634.
AR237744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 85 from patent US 6592874.
AR353254
                       AR234134 16 bp 1
Sequence 85 from patent US 6458560.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .16
/organism="unknown"
/wol_type="genomic DNA"
                                                               AR234134.1 GI:27276786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR353254.1 GI:33758991
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR237744.1 GI:27282551
                                                                                                                                                                                                                                                                                                                             873 CACTITICCIGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            873 CACTITCCIGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                           1 CACGGTCCTGAGGTGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 cacegreereageree 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
Unclassified.
1 (bases 1 to 16)
                                                                                                                                                                                                                                                                       Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                  AR234134
                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
                                   DEFINITION
                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
RESULT 823
                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                             RESULT 824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                  ACCESSION
                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                          AR237744
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
            AR234134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR353254
                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                      pp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     du
```

```
ò.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 06-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bickel, R., Ehricht, R., Ellinger, T., Ermantraut, E., Kaiser, T., Schulz, T. and Wagner, G.
Method for qualitative and/or quantitative detecting of molecular interactions on probe arrays
Patent: WO 0202810-A 11 10-JAN-2002,
Clondiag Chip Technologies GmbH (DE)
Location/Qualifiers
Schlesinger, S. and Frolov, I.
Recombinant alphavirus-based vectors with reduced inhibition of cellular marxononlecular synthesis
Patent: US 6592874-A 85 15-JUL-2003,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                   ch 3.9%; Score 11.2; DB 1; Length 16; ll Similarity 81.2%; Pred. No. 5.6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lundeberg, J., Ahmadian, A. and Nyren, P.
Allele-specific primer extension assay
Patent: WO 02068684-A 11 06-SEP-2002;
Pyrosequencing AB (SE); DZIECLEWSKA, Hanna Eva (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.9%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 5.6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .16
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX535772 16 bp D Sequence 11 from Patent WO02068684. AX535772 AX535772.1 GI:25262217
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX349227 16 bp Sequence 11 from Patent W00202810. AX349227
                                                                                                                                                         /mol_type="genomic DNA"
                                                                                                                   1. .16
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX349227.1 GI:18615259
                                                                                                                                                                                                                                                                                          873 CACTITICTIGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             791 TGGTGCCAAGAGCTCT 806
                                                                                                                                                                                                                                                                                                                      1 CACGGTCCTGAGGTGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGTGCTAAAAGCCCT 1
```

g

```
13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              unclassified.
                                                                                                                                                                      Query Match
Best Local Similarity
Matches 13; Conserv
                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Frolov, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13;
      SSEEE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           검토교육당당당당되다
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
                                                                                                Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                            RESULT 830
BD085655
                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 831
AX531607/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                              셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                  .;
0
                                                                                                                                                                    PAT 27-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD078828 16 bp DNA linear PAT 27-AUG-2002 Recombined alpha virus-base vector with reduced inhibition of cellular giant molecule synthesis.

BD078828 BD078828.1 GI:22624431
JP 2001519165-A/85.
                                                                                                                                                                                                                                                                        Viruses; ssRNA positive-strand viruses, no DNA stage; Flaviviridae; Flavivirus; Japanese encephalitis virus group.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                   Markoff,L. and Zeng,L.
Dengue viruses that are replication defective in mosquitos for use as vaccines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Topology: Linear; Recombined alpha virus-base vector with reduced inhibition of
                                                                                                                                                                                                                                                                                                                                                               Patent: WO 02074963-A 14 26-SEP-2002;
THE SECRETARY OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jr.T.W.D., Polo,J.M., Belli,B.A., Schlesinger,S., Dryga,S.A. and Frolov,I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \mathbb{P}^{\mathsf{C}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    H
                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PI SERGEY A DRYGA, ILYA FROLOV
PC C12N15/09, A61K35/76, A61K48/00, C12N1/15, C12N1/19, C12N1/21
C12N5/10, C12N5/10
C Strandedness: Single;
CC Topology: Linear;
CC Recombined alpha virus-base vector with reduced inhibitio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Recombined alpha virus-base vector with reduced inhibition of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-0CT-1997 US 08/944465
THOMAS W DUBENSKY JR, JOHN M POLO, BARBARA A BELLI, SONDRA
                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
Query Match 3.9%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 5.6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.2; DB 1; Length 16; larity 81.2%; Pred. No. 5.6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                    linear
                                                                                                                                                                      RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cellular giant molecule synthesis
Patent: JP 2001519165-A 85 23-OCT-2001;
CHIRON CORP, WASHINGTON UNIVERSITY
                                                                                                                                                                                                                                                                                                                                                                                                              1. .16
/organism="West Nile virus"
/mol_type="unassigned RNA"
/db_xref="taxon:11082"
                                                                                                                                                              Sequence 14 from Patent WO02074963.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified
JP 2001519165-A/85
23-OCT-2001
06-OCT-1998 JP 2000515020
06-OCT-1997 US 08/944465
                                                                                                                                                                                                               AX552598.1 GI:25896607
                                                          923 CACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GGACCAGATAGGGTCC 16
                                                                                                                                                                                                                                           West Nile virus (WNV)
West Nile virus
                                                                                     caccadececerere 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                737 GGACTTGGTAGGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (bases 1 to 16)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PI THOMAS
SCHLESINGER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OS
                                                                                       16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local {
                                                                                                                                                                                                                                                                                                                                                                                                              Source
                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                   RESULT 828
                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 829
                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                   AX552598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD078828
                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD085655 16 bp DNA linear PAT 27-AUG-2002
Recombinant alphavirus-based vectors with reduced inhibition of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Topology: Linear; -
Recombinant alphavirus-based vectors with reduced inhibition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cellular macro-molecular synthesis
Patent: JP 2001521369-A 85 06-NOV-2001;
CHIRON CORP, WASHINGTON UNIVERSITY
O'S Unidentified
PN JP 2001521369-A/85
PN JP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 16)
Jr.T.W.D., Polo,J.M., Belli,B.A., Schlesinger,S., Dryga,S.A. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Recombinant alphavirus-based vectors with reduced inhibition of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.2; DB 1; Length 16; ilarity 81.2%; Pred. No. 5.6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                        /organism='Unidentified'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'organism='Unidentified'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 5.6e+02;
iive 0; Mismatches 3;
                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cellular macro-molecular synthesis.
BD085655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

    .16
    /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  macro-molecular synthesis
cellular
giant molecule synthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Strandedness: Single;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of cellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD085655.1 GI:22631265
JP 2001521369-A/85.
unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   873 CACTITCCIGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        873 CACTITCCIGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CACGGTCCTGAGGTGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 cacegrecreaegree 16
```

```
Similarity
                                                                                                                                                                                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A26608
                                                                                                                                                                                                                                                           153834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                             DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                                 source
                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 836
                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                        RESULT 834
                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                     153834/c
                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A26608
                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Op
                                                                                                                                        ð
                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 22-NOV-2002
    PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                    Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
Unclassified.
1 (bases 1 to 17)
Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T.
C-myb ribozymes having 2'-5'-linked adenylate residues
                                                                                                                                                                                                                                                                         3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
7ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
     linear
                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp DNA Sequence 1575 from patent US 5817796. AR046782. GI:5968247
                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human posh-like protein 1
Patent: BP 1239051-A 1117 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                    Human posh-like protein 1
Patent: EP 1239051-A 1116 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
Sequence 1116 from Patent EP1239051.
AX531607.1 GI:25255004
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1117 from Patent EP1239051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX531608.1 GI:25255006
                                                                                                                                                                                                                                                                                                                                748 GGTCCCAGGGTCCCTA 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    748 GGTCCCAGGGTCCCTA 763
                                                                                                                                                                                                                                                                                                                                               17 GGACCCTGGGCCCCTA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 GGACCCTGGGCCCCTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                            Query Match 3.95
Best Local Similarity 81.25
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shannon, M.
                                                                                                                                         Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
                                                         KEYWORDS
SOURCE
ORGANISM
                  DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR046782/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                AX531608/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 833
                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 832
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

```
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 22-SEP-1995
                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                      PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
Unclassified.
Unclassified.
1 (bases 1 to 17)
Stinchcomb.D.T., Draper,K., McSwiggen,J. and Jarvis,T.
C-myb targeted ribozymes
Patent: US 5646042-A 1575 08-JUL-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.2; DB 1; Length 17; ilarity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ouery Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                    Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A NOVEL INTEGRIN beta SUBUNIT AND USES THEREOF Patent: WO 9212236-A 9 23-JUL-1992;
Location/Qualifiers

    1.7
    1.7
    7.0 rganism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                        153834 17 bp DNA Sequence 1575 from patent US 5646042.
JOURNAL Patent: US 5817796-A 1575 06-OCT-1998; ATURES Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A26608 17 bp DN
Consensus beta subunit primer BTE3F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
/mol_type="unassigned DNA"
                                                                             /mol_type="unassigned DNA"
                                        1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       838 CTTCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           707 GCGAGTCCCAGGAGAG 722
                                                                                                                                                                                                            707 GCGAGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 carcrecanadacec 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 GGGAGTTCGAGGAGAG 2
                                                                                                                                                                                                                                              17 degadrīceaddadad 2
                                                                                                                                                                                                                                                                                                                                                                                                                I53834.1 GI:2475037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A26608.1 GI:1248266
```

```
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 bp
     Location/Qualifiers
                  1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
                                                                                                                                 767
                                                                                                                                                                                                                                                                      AR045749.1 GI:5967214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           885 ATGCACTTACTTCTCA 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        874 ACTITICCTGAGATGCA 889
                                                                                                                                                 2 CCACGGTCCCCATGCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 Argcacrigcagcica 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 AATTTCTTGAGCTGCA 2
                                                                                                                                752 CCAGGGTCCCTAGGCC
                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.
                                                                        Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR046792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 841
AR046792/c
LOCUS
                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR045751/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
    FEATURES
                                                                                                                                                                                                                AR045749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                   RESULT
                                                                                                                                                                                                                                LOCUS
                                                                                                                                 ð
                                                                                                                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                         0;
                  PAT 26-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.

1 (bases 1 to 17)

Litwack, G., Alnemri, E.S. and Fernandez-Alnemri, T.

Isoforms of human interleukin-1. beta. converting enzyme and methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 29-SEP-1999
                                                                                                                                   Quint, W. and Kleter, B.
DETECTION AND IDENTIFICATION OF HUMAN PAPILLOMAVIRUS BY PCR AND LYPE-SPECIFIC REVERSE HYBRIDIZATION
Patent: WO 9914377-A 181 25-MAR-1999;
INNOGENETICS NV (BE); DELFTS DIAGNOSTIC LAB B V (NL)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                           Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 17)
Stinchcomb, D.T. and McSwiggen, J.A.
Interleukin-2 receptor gamma-chain ribozymes
Patent: US 5807743-A 1019 15-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1019 from patent US 5807743.
AR040171
AR040171.1 GI:5959534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 of using the same
Patent: US 5856169-A 11 05-JAN-1999;
Location/Qualifiers
                                                                                                                                                                                                                                      /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
              A97904 17 bp 1
Sequence 181 from Patent W09914377.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR027271
Sequence 11 from patent US 5856169.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             859
                                                                                                                                                                                                                                                                                                                                                  GGCTCCAGTTGGAACA 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR027271.1 GI:5938111
                                                                                                                                                                                                                                                                                                                                                                              GGCATCTGTTGGAACA 16
                                                       A97904.1 GI:6781142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rgaagarcerrerg 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             844 TGAAGACAGCGTCCTG
                                                                                                           unclassified.
1 (bases 1 to 17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
                                                                                   unidentified
                                                                                                 unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR027271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                   859
                                                                                                                                                                                                                                                                                                                                                                            Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16
                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
             LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 838
AR040171
                                                                                                                                                                                                                                                                                                                                                                                                                                     AR027271/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                JOURNAL
                                                    VERSION
KEYWORDS
                                                                                                                          REFERENCE
                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
A97904
                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

```
.
0
                                                                                                                                                                                                  PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 29-SEP-1999
                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                      ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                          Unknown.
Unknown.
Unclassified.
1 (bases 1 to 17)
Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.
C-myb ribozymes having 2'-5'-linked adenylate residues
Patent: US 5817796-A 542 06-OCT-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 17)
Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T. C-myb ribozymes having 2'-5'-linked adenylate residues Patent: US 5817796-A 544 06-OCT-1998;
Location/Qualifiers
3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 544 from patent US 5817796. AR045751 GI:5967216
                                                                                                                                                                                        Sequence 542 from patent US 5817796. AR045749
```

0;

```
PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 29-SEP-1999
                                                                                                                                                   PAT 29-SEP-1999
                                                                                                                                                                                                                                                         Unclassified.

1 (bases 1 to 17)

Gelb, B.D., Chapman, H. and Desnick, R.J.
Methods for the treatment of bone resorption disorders, including
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
Unclassified.
1 (Dases 1 to 17)
Grimm,S., Stinchcomb,D.T., McSwiggen,J., Sullivan,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Originary K.G.
Intercellular adhesion molecule-1 (ICAM-1) ribozymes
Patent: US 5837542-A 1676 17-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                    ch 3.9%; Score 11.2; DB 1; Length 17; 1 Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                     linear
               Indels
               3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR060182 17 bp DNA
Sequence 164 from patent US 5840540.
AR060182. GI:5986632
                                                                                                                                                     DNA
 Pred. No. 6e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR057472 17 bp DN
Sequence 1676 from patent US 5837542.
AR057472 GI:5983049
                                                                                                                                                                                                                                                                                                                 osteoporosis
Patent: US 5830850-A 5 03-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                 1. .17
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                   17 bp
5830850.
                                                                                                                                                   AR052183
Sequence 5 from patent US
AR052183
 l Similarity 81.2%; Pr. 13; Conservative 0;
                                               818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGATTATCATCACCA 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           897 CTCAGCTTCTGCGATC 912
                                                                                                                                                                                               AR052183.1 GI:5975547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cresecricisce 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGATTTCCATCAGCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81.2%;
                                                                     16 CTCTCTTGAAACTCAG
                                             803 CTCTCCTCCAACTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
Best Local Similarity
Matches 13; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 13; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local
                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                        RESULT 844
AR052183
                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR060182
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR057472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                              SOURCE
                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                à
                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 29-SEP-1999
                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
Unclassified.
Unclassified.
1 (bases 1 to 17)
Stinchocomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T.
Stinchocomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T.
C-myb ribozymes having 2'-5'-linked adenylate residues
Patent: US 5817796-A 1619 06-OCT-1998;
Location/Qualifiers
                                                                         Unknown.
Unclassified.
Unclassified.
1 (bases 1 to 17)
Stinchcomb, Dr., Draper, K., McSwiggen, J. and Jarvis, T.
Stinchcomb, Dr., Draper, E., 1inked adenylate residues
C-myb ribozymes having 2'-5'-linked adenylate residues
Patent: US 5817796-A 1585 06-0CT-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 17)
Stinchcomb.D.T., Draper.K., McSwiggen,J. and Jarvis,T.
C-myb ribozymes having 2'-5'-linked adenylate residues
Patent: US 8817796-A 1617 06-OCT-1998;
Location/Qualifiers
                                                                                                                                                                                                                                           Query Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp DNA
US 5817796.
                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                            AR046824 17 bp DN Sequence 1617 from patent US 5817796.
   Sequence 1585 from patent US 5817796.
AR046792
AR046792.1 GI:5968257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                  /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR046826
Sequence 1619 from patent
AR046826
AR046826.1 GI:5968291
                                                                                                                                                                                                                                                                                                          874 ACTITCCTGAGATGCA 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                803 CTCTCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                                                                                                             AR046824
AR046824.1 GI:5968289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCTCTTGAAACTCAG 2
                                                                                                                                                                                                                                                                                                                                      17 AATTTCTTGAGCTGCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 843
AR046826/c
                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                  AR046824/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
FEATURES
                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                     RESULT 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
FEATURES
                                                                                                                          AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                    ACCESSION
                                                                                                             REFERENCE
                                  VERSION
KEYWORDS
                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
```

ð q à d

ö

ö

```
0
                                                                                                                                                                                                                                                                                                                                                 PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 31-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 17)
Arnold, L.J. Jr., Reynolds, M.A., Schwartz, D.A. and Daily, W.J. Oligonucleoside cleavage compounds and therapies
Patent: US 5854410-A 25 29-DEC-1998;
                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·,
                                           1 (bases 1 to 17)
St. George-Hyslop, P.H., Rommens, J.M. and Fraser, P.E.
Nucleic acids encoding presentlin II
Patent: 18 5846546-A 164 24-NOV-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                               DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 17)
Sheppard,D., Quaranta,V. and Pytela,R.
Integrin .beta. subunit and uses thereof
Patent: US 5962643-A 8 05-007-1999;
                                                                                                                                                                               3.9%; Score 11.2; DB 1
81.2%; Pred. No. 6e+02;
vative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                         Sequence 25 from patent US 5854410.
AR069075
AR069075.1 GI:6001282
                                                                                                                    1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8 from patent US 5962643.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR078415.1 GI:10005161
                                                                                                                                                                                                                                        920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            851 AGCGTCCTGGCTCCAG 866
                                                                                                                                                                                                                                                                    CATCTCCACCACGTTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCTTCCTTGCTCCTG 17
                                                                                                                                                                                                          13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
Unclassified.
                             Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclassified.
                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13;
                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                               RESULT 847
AR069075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 848
AR078415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                          Matches
                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
```

```
PAT 31-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 07-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
Unclassified.
1 (bases it to 17)
Lin, L.-F.H., Collins, F.D., Doherty, D.H., Lile, J. and Bektesh, S.
Glial cell line-derived neurotrophic factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 17)
St. George-Hyslop, P.H., Rommens, J.M. and Fraser, P.E.
Genetic sequences and proteins related to alzheimer's disease
Patent: US 5986054A 164 16-NOV-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ch 3.9%; Score 11.2; DB 1; Length 17; 1 Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                              DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                  1 (bases 1 to 17)
Sheppard,D., Quaranta,V. and Pytela,R.
Integrin. beta. subunit and uses thereof
Patent: US 5962643-A 9 05-0CT-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.2; DB 1
81.2%; Pred. No. 6e+02;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 164 from patent US 5986054.
AR087337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
                                                                                           17 bp
Sequence 9 from patent US 5962643.
AR078416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR104490
Sequence 18 from patent US 6093802.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                               /organism="unknown"
                                                                                                                                          AR078416.1 GI:10005162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR087337.1 GI:10014100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ARÎ04490
ARI04490.1 GI:12817198
                                                                                                                                                                                                                                                                                                                                                                                                                        838 CTICTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            920 CATCACCACCACCTC 935
| |||| |||||| ||
1 CATCTCCGAAGACGGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 CATCTCCGAAGACGGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCTCCACCACGTIC 16
                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                        Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR087337
                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                          DEFINITION
                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                              RESULT 849
                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                              AR078416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR087337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AR104490
                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
```

08-AUG-2001

PAT

linear

DNA

```
17 bp I
Sequence 18 from patent US 6221376.
AR147206
                                                                                 AR147206.1 GI:15111009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                        Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C12P21/02,
PC
                                                                                                             Unknown
                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 855
BD253937/c
                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                    TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
JOURNAL
            RESULT 854
                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                         AR147206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ó
                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 16-MAY-2001
                                                                                                                                                                                                                                               PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 17)
St. George-Hyslop, P.H., Rommens, J.M. and Fraser, P.E.
Methods for determining risk of developing alzheimer's disease by detecting mutations in the presentiin 1 (PS-1) gene Patent: US 6194153-A 164 27-FEB-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                              (bases 1 to 17)

Draim, S., Stinchcomb, D.T., McSwiggen, J., Sullivan, S. and
Draper, K.G.
Ribozyme treatment of diseases or conditions related to levels of
intercellular adhesion molecule-1 (ICAM-1)
Patent: US 6132867-A 1676 17-OCT-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ch 3.9%; Score 11.2; DB 1; Length 17; l Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                 Indels
                                                                                                                 3;
                                                                                 Query Match
3.9%; Score 11.2; DB 1;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                               17 bp DNA
US 6132967.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 164 from patent US 6194153. AR134524.1 GI:14123429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .17
/organism="unknown"
/mol_type="unassigned DNA"
Patent: US 6093802-A 18 25-JUL-2000;
Location/Qualifiers
                                                        /mol_type="unassigned DNA"
                              1. .17
/organism="unknown"
                                                                                                                                                                                                                                                           Sequence 1676 from patent
AR115230
AR115230.1 GI:14095552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   897 CTCAGCTTCTGCGATC 912
                                                                                                                                              841 CTCTGAAGACAGCGTC 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 CATCTCCACCACGTTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cresectriciscoace 17
                                                                                                                                                             1 CTCTGGAGCCAGGGTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                   Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                 AR115230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                     Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
                                 source
                                                                                                                                                                                                                                               LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 853
                                                                                                                                                                                                                    RESULT 852
                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR134524
                                                                                                                                                                                                                                   AR115230
                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                         qq
```

```
PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·.
                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Regulation of repressor genes using nucleic acid molecules FH Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OS Eukaryote
N JP 2002541795-A/1730
PD 10-DEC-2002
PF 11-APR-2000 JP 2000611654
PR 12-APR-1999 US 60/129390
PI IAMRENCE BLAIT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC C12N15/09, A61K38/00, A61K48/00, A61P43/00, A61EP43/00, C12N15/10, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (C12P21/02,C12R1:91), (C12P21/02,C12R1:91),C12N15/00,C12N5/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C12P21/02,C12P21/02/A61K31/711,(C12N5/10,C12R1:91),(C12P21/02,C12R1:91),
CC12R1:91),
PC (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12NS/0
RG1K37/00,C12R1:91)
CC Regulation of repressor genes using nucleic acid molecules
Juniablists.

1 (Dases 1 to 17)

Lin,L.-F.H., Collins,F.D., Doherty,D.H., Lile,J. and Bektesh,S.

Glial cell line-derived neurotrophic factor

Patent: US 6221376-A 18 24-APR-2001;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD253937 17-BP DNA linear PAT 17-Regulation of repressor genes using nucleic acid molecules. BD253937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unclassified.

1 (bases 1 to 17)
Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
Regulation of repressor genes using nucleic acid molecules Patent: JP 2002541795-A 1730 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                    Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism='Eukaryote'
                                                                                                                                      1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .17
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD253937.1 GI:33063707
JP 2002541795-A/1730.
unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       754 AGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                               841 CTCTGAAGACAGCGTC 856
                                                                                                                                                                                                                                                                                                                                                                                               1 CTCTGGAGCCAGGGTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
```

g

```
CICIGGIAATAGCAAT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A61K37/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unidentified unclassified.
                                                                                                                                                                                                                                                                 Best Local Similarity
                                                            C12R1:91)
                                                                                                                             Key
                                                                         5555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OS
PD
PF
                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                           BD255119
                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Regulation of repressor genes using nucleic acid molecules.
BD254540
BD254540.1 GI:33064310
UP 2002541795-A/2333.
                                                                                   BD254258 17-JUL-2003
Regulation of repressor genes using nucleic acid molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                       C12P21/02, C12P21/02//A61K31/711, (C12N5/10, C12R1:91), (C12P21/02, PC
                                                                                                                                                                                                                                                                                                                                                                                                  C12R1:91),
PC (C12P21/02,C12R1:91),(C12P21/02,C12R1:91),C12N15/00,C12N5/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Regulation of repressor genes using nucleic acid molecules FH Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                    PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JP 2002541795-A/2333
10-DEC-2002
11-APR-2000 JP 2000611654
12-APR-1999 US 60/129390
LAWRENCE BLAIT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN PC
                                                                                                                                                                                                                                                                                                                             LAWRENCE BLATT, MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN 5/09, A61K38/00, A61K48/00, A61P43/00, A61K98/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                          1 (bases 1 to 17)
Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.
Bequlation of repressor genes using nucleic acid molecules
Patent: 17 2002541795-A 2051 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       In (bases 1 to 17)
Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.
Regulation of repressor genes using mucleic acid molecules
Patent: JP 2002541795-A 2333 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism='Eukaryote'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .17
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                           Bukaryote
JP 2002541795-A/2051
10-DEC-2002
11-APR-2000 JP 2000611654
12-APR-1999 US 60/129390
                                                                                 17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                            A61K37/02,
(C12N5/00,C12R1:91)
                                                                                                           BD254258
BD254258.1 GI:33064028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     964
              7
                                                                                                                                      JP 2002541795-A/2051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 GAAACAAGAGCAAAAT 1
AGTGTCTGTAGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  949 GCAAGAAGAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryote
                                                                                                                                                    unidentified
                                                                                                                                                                 unidentified
                                                                                                                                                                             unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                            C12N15/09, A
C12P21/02,
                                                                                 BD254258
                                                                                                                                                                                                                                                              OS
PP
PF
PR
                                                                                                                                                                                                                                                                                                                                                                                                                2222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OS
PN
PD
PF
PF
PR
              17
                                                   RESULT 856
BD254258/c
                                                                                                                                   KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 857
BD254540
LOCUS
DEFINITION
                                                                                             DEFINITION
                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                              LOCUS
```

원 ð

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD255119 17-JUL-2003 Regulation of repressor genes using nucleic acid molecules.
                                                                                                                                                       Action (C12NS/00,C12R1:91)
Regulation of repressor genes using nucleic acid molecules FH
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                   C12P21/02, C12P21/02//A61K31/711, (C12N5/10, C12R1:91), (C12P21/02, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PC
                                                                                                                  (C12P21/02,C12R1:91), (C12P21/02,C12R1:91),C12N15/00,C12N5/00,
A61K37/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (C12P21/02, C12R1:91), (C12P21/02, C12R1:91), C12N15/00, C12N5/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      РС
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Regulation of repressor genes using nucleic acid molecules Location/Qualifiers source 1.17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryote
10 2002241795-A/2912
11-APR-2000
11-APR-2000 JP 2000611654
11-APR-1999 US 60/122390
IAWRENCE BLATY MICHAEL ZWICK, PAMELA PAVCO, JAMES MCSWIGGEN
12/09, A61K38/00, A61K48/00, A61P43/00, A61LSN5/10, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C12P21/02, C12P21/02//A61K31/711, (C12N5/10,C12R1:91), (C12P21/02,
C12N15/09,A61K38/00,A61K48/00,A61P43/00,A61P43/00,C12N5/10,PC
C12P21/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 17)
Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.
Blatt, L., Zwick, M., Pavco, P. and Mcswiggen, J.
Begulation of repressor genes using nucleic acid molecules
Patent: JP 2002541795-A 2912 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                  /organism='Eukaryote'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             organism='Eukaryote'.

    17 .17 /organism="unidentified" /mol_type="genomic DNA" /db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .17
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (C12N5/00, C12R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD255119
BD255119.1 GI:33064889
JP 2002541795-A/2912.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             753 CAGGGTCCCTAGGCCT 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          726 CTCTGGTCATAGGACT 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 CAGGGICTCTAGTGCT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 81.2
Matches 13; Conservative
```

```
PC
PC
PC
CC
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13;
                                                                                                                       Key
                                                                                                                                                                                                                                                                                                                                                                                                 13;
                    2222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                       Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD257469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            du
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
                                                                                                                                                                                                                                                                                          Regulation of repressor genes using nucleic acid molecules

Regulation of repressor genes using nucleic acid molecules

Regulation of repressor genes using nucleic acid molecules

RIDOZWAR PHARMACUTICALS INC

OS ENKARYOLE

DN JP 2002541795-A/3382

PD 10-DEC-2002

PF 11-APR-2000 JP 2000611654

PR 12-APR-1999 US 60/129990

PT LAMRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC

C12P21/02,

C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        wundentified
unidentified
unclassified.
E 1 (bases 1 to 17)
S Regulation of repressor genes using nucleic acid molecules
Regulation of repressor genes using nucleic acid molecules
L Patent: JP 200241795-A 3383 10-DEC-2002;
RIBOZYME PHARMACEUTICALS INC
OS BUKARYOTE
PN JP 2002541795-A/3383
PD 10-DEC-2002
PF 11-APR-2000 JP 2000611654
PR 12-APR-1999 US 60/129390
PI LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC
C12N15/09,AGIK38/00,AGIK48/00,AGIR48/00,AGIP43/00,C12N5/10, PC
C12P21/02,
Regulation of repressor genes using nucleic acid molecules. BD255899
BD25589 J GI:33065359
JP 2002541795-A/3382.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Regulation of repressor genes using nucleic acid molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (C12P21/02, C12R1:91), (C12P21/02, C12R1:91), C12N15/00, C12N5/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Regulation of repressor genes using nucleic acid molecules Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                  unidentified
unclassified.
( Dases 1 to 17)
Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism='Eukaryote'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .17
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A61K37/02,
(C12N5/00,C12R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD255590.1 GI:33065360
JP 2002541795-A/3383.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              876 TITCCTGAGATGCACT 891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rrrccreaaarcracr 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PC
CC
CC
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
                       BD255589/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BD255590/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
JOURNAL
  RESULT 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
```

ð g

```
BD257469 17 bp DNA linear PAT 17-JUL-2003
Regulation of repressor genes using nucleic acid molecules.
BD257469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGENST/02,
(C12N5/00,C12R1:91)
Regulation of repressor genes using nucleic acid molecules FH
Location/Qualifiers
              _{\rm PC}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \mathbb{F}^{C}
                                                                                                                              H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .:31),
(C12P21/02,C12R1:91), (C12P21/02,C12R1:91),C12N15/00,C12N5/00,
                                                   (1321/02, C12R1:91), (C12P21/02, C12R1:91), C12N15/00, C12N5/00, A61K37/02, (C12N5/00, C12R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PN JP 2002541795-A/5262
PD 10-DEC-2002
PP 11-APR-2000 DP 2006611654
PR 12-APR-1999 US 60/129390
PI LAWRENCE BLATT,MICHAEL ZWICK,PAMELA PAVCO,JAMES MCSWIGGEN PC CI2N15/09,AG1K38/00,AG1K48/00,AG1P43/00,AG1K20,PC
                                                                                                                           Regulation of repressor genes using nucleic acid molecules Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PC
C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02,
PC
C12P21/02,C12P21/02//A61K31/711,(C12N5/10,C12R1:91),(C12P21/02,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unclassified.

1 (bases 1 to 17)

Blatt,L., Zwick,M., Pavco,P. and Mcswiggen,J.

Regulation of repressor genes using nucleic acid molecules Patent: 17 2002541795-A 5262 10-DEC-2002;

RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                      ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17; larity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                  organism='Eukaryote'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism='Eukaryote'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11. .17
/organism="unidentified"
                                                                                                                                                                                                                                            1. .17
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                    /mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD257469.1 GI:33067239
JP 2002541795-A/5262.
unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 897 CTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                              876 TTTCCTGAGATGCACT 891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 crcgccrccrccacc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 Trrccrdaaarcracr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryote
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              C12P21/02,
                                            C12R1:91)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C12R1:91)
```

```
/organism="unknown"
                                          .17
                                                                                                                                                                                         814 CTCAGGGTTGGCTGTG 829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               837 TCTTCTCTGAAGACAG 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 TGTTCTTTAAAGACAG 17
                                                                                                                                                                                                                  17 crccedarrectrre 2
                                                                                                                                                                                                                                                                                                                  I37527.1 GI:2085487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        I37528.1 GI:2085488
                                                                                                                                                                   13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.99
Best Local Similarity 81.23
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                        Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                        rrna
                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown
  SEELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                       RESULT 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 865
137528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                   VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                          PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 29-SEP-1997
                                                                                                                                                                                                                                                                                                  PI DAVID J LOCKHART, THOMAS RYDER, PAMELA SKLAR
C (1201/68,C12M15/09,C12N15/09,C12N15/09,G01N33/53, PC
G01N33/566,
PC G01N37/00,C12N15/00,C12N15/00,C12N15/00
                                                                                                                                                                                                                                                      PI
                                                                                            SM synthetic construct
artificial sequences.

I (bases 1 to 17)

E (bases 1 to 17)

S Fan, J.B., Hirschhorn, J.N., Huang, X., Kaplan, P., Lander, E.S., Lockbart, D.J., Ryder, T. and Sklar, P.

Universal arrays

L Patent: JP 202539849-A 324 26-NOV-2002;
WHITHERAD INSTITUTE FOR BIOMEDICAL RESEARCH, AFFYMETRIX INC
OS Artificial Sequence
PP 27-MRA-1090 US 60/126473, 23-JUN-1999 US 60/140359 PI
JIAN BING FAN, JOEL N HIRSCHHORN, XIAOHUA
HUANG, PAUL KAPLAN, ERIC
PI SLANDER,
PP LOCKHART, THOMES RYDER, PAMELA SKLAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                      60/140359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                .. .17
organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E05533 17 bp DNA linear DNA sequence of probe for Matsukate germ detection.
                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-JAN-1993 JP 1993003169
14-JAN-1992 JP 92P
14-JAN-1992 UP 92P
ARAI TAKAO, ONO TADAO
C12Q1/68,C12Q1/04,(C12Q1/04,C12R1:645);
strandedness: Double;
                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers

    .17
    'organism="synthetic construct"
|moi_type="genomic DNA"
|db_xref="taxon:32630"

                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB :81.2%; Pred. No. 6e+02; tive 0; Mismatches
                        17 bp
                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                Universal arrays.
BD266324.1 GI:33076092
JP 2002539849-A/324.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  762 TAGGCCTCCACTTCTG 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 TIGCCTCCACATCIG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 81.20,
Thes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E05533.1 GI:2173721
                                                                                     synthetic construct
                                                                                                                                                                                                                                                                                                                                                       Primer
                                                                                                                                                                                                                                                                                                                                                                                source
                       BD266324
                                                                                                                                                                                                                                                                                                                                        김성표보단
       BD266324/c
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        E05533/c
LOCUS
DEFINITION
RESULT 862
                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 863
                                                                     KEYWORDS
SOURCE
                                                                                                                       REFERENCE
                                                                                                                                   AUTHORS
                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                            TITLE
                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 13-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 13-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 17)
Draper,K.G., Pavco,P., McSwiggen,J., Gustofson,J. and
Stinchcomb,D.T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unclassified.

1 (bases 1 to 17)

Draper,K.G., Pavco,P., McSwiggen,J., Gustofson,J. and Stinchcomb,D.T.
Stromelysin targeted ribozymes
Patent: US 5612215-A 541 18-MAR-1997;
Location/Qualifiers
                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ch 3.9%; Score 11.2; DB 1; Length 17; al Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
Feature is identified by experimental;
Key
                                                                                                                                    /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                              /note='probe,MP2'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stromelysin targeted ribozymes
Patent: US 5612215-A 540 18-MAR-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                         137527 17 bp D1 Sequence 540 from patent US 5612215.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           137528 17 bp DP
Sequence 541 from patent US 5612215.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
/mol_type="unassigned DNA"
```

0

Gaps

; 0

PAT 07-OCT-1997

linear

d à

```
Unknow...
Unclassified.
Unclassified.
1 (bases 1 to 17)
Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T.
C-myb targeted ribozymes
C-myb targeted ribozymes
Patent: US 5646642-A 1617 08-JUL-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                Unclassified.

1 (bases 1 to 17)
Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T. C-myb targeted ribozymes
Patent: US 5646042-A 1585 08-UUL-1997;
Location/Qualifiers
Stinchcomb,D.T., Draper,K., McSwiggen,J. and Jarvis,T.C-myb targeted ribozymes
Patent: US 5646042-A 544 08-JUL-1997;
Location/Qualifiers
                                                                                                                    3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.2; DB 1;
B1.2%; Pred. No. 6e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 1617 from patent US 5646042.
153876
                                                                                                                                                                                                                                                                          Sequence 1585 from patent US 5646042.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .17
/organism="unknown"
/wol_type="unassigned DNA"
                                                              1. .17
/organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                               874 ACTITCCTGAGATGCA 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             874 ACTITCCIGAGAIGCA 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        803 CTCTCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 CTCTCTTGAAACTCAG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 AATTTCTTGAGCTGCA 2
                                                                                                                                                                                                          17 AATTTCTTGAGCTGCA 2
                                                                                                                                                                                                                                                                                                                           I53844.1 GI:2475047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         I53876.1 GI:2475079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 13; Conserva
                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
    AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                    RESULT 869
I53844/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     153876/c
                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 07-0CT-1997
                                                                                                           PAT 13-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
Unclassified.
1 (bases 1 to 17)
Stinchcomb.D.T., Draper,K., McSwiggen,J. and Jarvis,T.
C-myb targeted ribozymes
Patent: US 5646042-A 542 08-JUL-1997;
Location/Qualifiers
                                                                                                                                                                                                           Unclassified.

1 (bases 1 to 17)

Draper,K.G., Pavco,P., McSwiggen,J., Gustofson,J. and Stinchcomb,D.T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; attive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02;
                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                       3;
                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 bp Di
Sequence 544 from patent US 5646042.
152803
                                                                                                                                                                                                                                                                     Stromelysin targeted ribozymes
Patent: US 5612215-A 567 18-MAR-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 bp Di
Sequence 542 from patent US 5646042.
152801
                                                                                                           137554 17 bp DN Sequence 567 from patent US 5612215.
137554 137554.1 GI:2085514
                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                               /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  885 ATGCACTTACTTCTCA 900
                                                                                                                                                                                                                                                                                                                                                                                                                                    769 CCACTTCTGAGGGCAG 784
          837 TCTTCTCTGAAGACAG 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 Argeacrigeagerea 17
                                   1 refrefrirahagacag 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 ccacrgcrgaagaag 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GI:2474002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               I52803.1 GI:2474004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 81.23
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (bases 1 to 17)
                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   152801.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                   Unknown,
                                                                                                                                                                                                                                                                                                                                                                                                         13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                     DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                               RESULT 866
I37554/c
                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 868
                                                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        I52803/c
                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             I52801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                              LOCUS
```

ð

·;

Gaps

·: 0

3; Indels

Length 17;

PAT 07-0CT-1997

linear

0

Gaps

0

3; Indels

Length 17;

ð qq

```
AR183020.1 GI:20226227
                                                                                                                  837 TCTTCTCTGAAGACAG 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    769 CCACTICTGAGGGCAG 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      838 CTTCTCTGAAGACAGC 853
                                                                                                                                             1 rgrrcrrraaagacag 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 CATCTCCGAAGACGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 CCACTGCTGAAGGAAG 2
                                                                                                                                                                                                                                                       I94404.1 GI:3938874
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 81.29
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                 Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unclassified.
                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR187124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                            94404
                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 876
AR187124/c
LOCUS
                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
JOURNAL
FEATURES
                                                                                                                                                                                    RESULT 874
                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                   194404/c
                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR183020
                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 01-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 01-DEC-1998
                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
                                                                                                                                     1 (bases 1 to 17)
Stinchcomb, D.T., Draper, K., McSwiggen, J. and Jarvis, T. C-myb targeted ribozymes
Patent: US 5646042-A 1619 08-UUL-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 17)
Draper,K.G., Pavco,P., McSwiggen,J., Gustofson,J. and Stinchcomb,D.T. Educing stromelysin RNA via ribozymes Patent: US 5731295-A 540 24-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 17)
Draper,K.G., Pavco,P., McSwiggen,J., Gustofson,J. and Stinchcomb,D.T.
Method of reducing stromelysin RNA via ribozymes
Patent: Us 5731295-A 541 24-MAR-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
ative 0; Mismatches 3; Indels
                                linear
                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
rative 0; Mismatches 3;
                               53878 17 bp DN.
equence 1619 from patent US 5646042.
                                                                                                                                                                                                                                                                                                                                                                                                             17 bp Dl
Sequence 540 from patent US 5731295.
194377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 194378 17 bp D1
Sequence 541 from patent US 5731295.
                                                                                                                                                                                                                                     /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="unassigned DNA"
                                                                                                                                                                                                           1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unknown"
                                                                                                                                                                                                                                                                                                                   803 CTCTCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   837 TCTTCTCTGAAGACAG 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rgrrcrrraaagacag 17
                                                      I53878
I53878.1 GI:2475081
                                                                                                                                                                                                                                                                                                                                            CTCTCTTGAACTCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                      I94377.1 GI:3938847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          194378
194378.1 GI:3938848
                                                                                                                                                                                                                                                          Query Match 3.9°
Best Local Similarity 81.2°
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 81.28
Matches 13; Conservative
                                                                                                                         Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.
                                                                                               Unknown
                                                                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                             I53878
                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
RESULT 871
I53878/c
LOCUS
                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                   RESULT 872
194377
                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 873
I94378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
DEFINITION
                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
FEATURES
                                                                                                                                                                               JOURNAL
                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
```

```
PAT 01-DEC-1998
                                                                                                                     ó,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 20-APR-2002
                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 17)
Sheppard,D., Quaranta,V. and Pytela,R.
Isolated nucleic acid encoding an integrin .beta.-subunit
Patent: US 6339148-A 8 15-JAN-2002;
                                                                                                                   ٠;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ô
                                                                                                                                                                                                                                                                                                                                                                                                                                    Draper, K.G., Pavco, P., McSwiggen, J., Gustofson, J. and Stinchcomb, D.T.
McHod of reducing stromelysin RNA via ribozymes
Patent: US 5731295-A 567 24-MAR-1998;
                                                                       Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                         17 bp D. Sequence 567 from patent US 5731295.
1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 8 from patent US 6339148.
AR183020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
```

0

```
17 bp DN
Sequence 164 from patent US 6485911.
AR256796
                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR254897.1 GI:27303945
                                                                                                                                                                                                                                                                                                                                                                                     AR202457.1 GI:20256996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841 CTCTGAAGACAGCGTC 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       859 GGCTCCAGTTGGAACA 874
                                                                                                                                         824 GCTGTGTCTTTTCT 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCATCTGTTGGAACA 16
                                                                                                                                                                       2 GCTCTGTCTCTTAT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       crcregaeccaeedrc 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13; Conservative
                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 13; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 13; Conserv
                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                           13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 881
AR256796
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                 LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                RESULT 879
AR202457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR254897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                     VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                              ð
                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknow...
Unknow...
Unclassified.
1 (bases 1 to 17)
1 volument of the second of the se
                                                                                                                                         Unclassified.

1 (bases 1 to 17)

1 (bases 1 to 17)

2 McSwiggen, J., Stinchcomb, D. and Escobedo, J.

Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 2612 12-FEB-2002;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.

1 (bases 1 to 17)
Pavco,P., McSwiggen,J., Stinchcomb,D. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346398-A 7352 12-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
3.9%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR191864
Sequence 7352 from patent US 6346398.
AR191864
AR191864.1 GI:20237829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR192365 17 bp DN Sequence 7853 from patent US 6346398.
AR192365
Sequence 2612 from patent US 6346398.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                        1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GI:20238330
                                                  AR187124.1 GI:20233089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                852 GCGTCCTGGCTCCAGT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  862 TCCAGTTGGAACACTT 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGreerrecagn 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 rccadarddaaccarr
                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR192365.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                              AR187124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                               Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                          JOURNAL
                           ACCESSION
                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR192365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR191864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                          TITLE
                                                  VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

```
PAT 20-DEC-2002
                                                                                                                                                                                                                                                   PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.

1 (bases 1 to 17)

Van Doorn,L.-J., Quint,W., Kleter,B. and TerSchegget,J.

Detection and identification of human papillomavirus by PCR and type-specific reverse hybridization
Patent: US 6482588-A 181 19-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                     [ fases 1 to 17)
Lin,L.-F.H., Collins,F.D., Doherty,D.H., Lile,J. and Bektesh,S. Glial cell line-derived neurotrophic factor
Patent: US 6362319-A 18 26-MAR-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.2; DB 1; Length 17; llarity 91.2%; Pred. No. 6e+02; Conservative 0; Mismatches 2: T-2-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
                                     Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                     linear
                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
                                                                         3;
                                     3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR254897 17 bp D.
Sequence 181 from patent US 6482588.
AR254897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                             17 bp 1
Sequence 18 from patent US 6362319.
AR202457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .17
/organism="unknown"
/wol_type="unassigned DNA"
                                                                           Mismatches
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
```

·.

ó

PAT 20-DEC-2002

linear

DNA

```
16
                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 885
AR286517/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 886
AR323734/c
                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                            RESULT 884
                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                         AR286191
                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                         SOURCE
                                                                                q
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                                                                                                                                                                                                    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·;
                                                                                                                                                                                                                                                                                                                                                             PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 29-JAN-2003
                                                                1 (bases 1 to 17)
St. George-Hyslop, P.H., Rommens, J.M. and Fraser, P.E.
Methods for determining risk of developing alzheimer's disease by detecting mutations in the presentil 2 (FS-2) gene
Patent: US 6485911-A 164 26 NOV-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.

1 (bases 1 to 17)

1 (bases 1 to 17)

Frazer, J.H. and Zhou, J.

Nucleic acid sequence and methods for selectively expressing a protein in a target cell or tissue

Patent: US 6489141-A 32 03-DEC-2002;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 17)
Mollet, B., Germond, J.E. and Lapierre, L.
Mobile genetic elements as tools for genetic modification of L.
delbrueckii or L. helveticus
Patent: US 6331140-A 6 18-DEC-2001;
                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                      3.9%; Score 11.2; DB 1; Length 17; 31.2%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 11.2; DB 1; Length 17;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                             /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                        AR258362 17 bp 1
Sequence 32 from patent US 6489141.
AR258362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 6 from patent US 6331140.
AR262705
AR262705.1 GI:28074348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                   1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
AR256796.1 GI:27306404
                                                                                                                                                                                                                                                                                                                                                                                                AR258362.1 GI:27308649
                                                                                                                                                                                                                                                              935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%;
81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             836 TICTICTCTGAAGACA 851
                                                                                                                                                                                                                                                                                      1 CATCTCCACCACGTTC 16
                                                                                                                                                                                                                   81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rrcrcrrcrcaagaca 1
                                                                                                                                                                                                                                                           920 CATCACCACCCTC
                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                      Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unclassified.
                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16
                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 883
AR262705/c
                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                              AR258362/c
                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                              RESULT 882
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                      JOURNAL
                                                                 REFERENCE
                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
           KEYWORDS
                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                            TITLE
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                             à
```

```
·;
                                                                                                                                                                                                                    PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 17-AUG-2003
                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·:
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
               3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; artive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 17)
Beigelman, L., Burgin, A., Beaudry, A., Karpeisky, A., Marulic-Adamic, J., Sweedler, D. and Zinnen, S. Synthetic ribonucleic acids with RNAse activity Patent: US 6528640-A 563 04-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 17)
Beigelman,L., Burgin,A., Beaudry,A., Karpeisky,A., Matulic-Adamic,J., Sweedler,D. and Zinnen,S.
Synthetic ribonucleic acids with RNAse activity
Patent: US 6528640-A 889 04-MAR-2003;
Location/Qualifiers
                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 bp RNA
US 6566127.
                                                                                                                                                                                                            Sequence 563 from patent US 6528640.
AR286191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 889 from patent US 6528640. AR286517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1136 from patent AR323734 AR323734.1 GI:33709542
                                                                                                                                                                                                                                                                       AR286191.1 GI:29723787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR286517.1 GI:29724113
                                                                                       879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       742 IGGIAGGGICCCAGGG 757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      826 TGTGTCTTTTTTTT 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 redrodeccocces 16
                                                                                                                       17 CGGTTGGAACGATTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGGTCGCTTTTGTTC 1
Query Match
Best Local Similarity 81.2%
                                                                                       864 CAGTIGGAACACTITC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR323734
                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
```

à

ö

```
PAT 17-AUG-2003
                                                                                                                                                                PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                 Unclassified.

(Dases 1 to 17)

Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.

Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.

Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 46778 20-MAY-2003;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 4919 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
.ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.2; DB 1; Length 17;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
               Indels
             3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR327518 17 bp RNA Sequence 4920 from patent US 6566127. AR327518 GI:33713326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RNA
Pred. No. 6e+02;
0; Mismatches
                                                                                                                                                                  17 bp RNA
US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 4919 from patent US 6566127.
AR327517
AR327517.1 GI:33713325
                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unknown"
                                                                                                                                                             AR327276
Sequence 4678 from patent AR327276
                                                                                                                                                                                                                    AR327276.1 GI:33713084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           831 CICITITICICICA 846
                                                839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        824 GCTGTGTCTTTTCT 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         crecrecerrerea 17
                                                                  2 GCTCTGTCTCTTAT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTGCGACTCTCTTCT 16
Best Local Similarity 81.2%;
Matches 13; Conservative
                                                824 GCTGTGTCTCTTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                       Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
                                                                                                                                  RESULT 889
AR327276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 891
                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR327517
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR327518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             [hasses 1 to 17]
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Batco, P., McSwiggent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 3636 20-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J. Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J. Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 656612-A 3161 20-MAY-2003; Location/Qualifiers
                                                                    1. (bases 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 1136 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·.
                                                                                                                                                                                                                                                                         ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; rive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17;
                                                                                                                                                                                                                                  3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR326234 17 bp RNA Sequence 3636 from patent US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                          17 bp RN.
US 6566127.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
/wol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="unassigned RNA"
                                                                                                                                                                                                     /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                       /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3161 from patent
AR325759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR326234.1 GI:33712042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR325759.1 GI:33711567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              852 GCGTCCTGGCTCCAGT 867
                                                                                                                                                                                                                                                                                                        862 TCCAGTTGGAACACTT 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCTCCTCGTTCCAGT 17
                                                                                                                                                                                                                                                                                                                                        17 rccadarddaaccarr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
                                                    Unclassified.
                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                           AR325759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                   Unknown
                                    Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                  ORGANISM
                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                        RESULT 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
FEATURES
                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR326234
LOCUS
                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                        AR325759
                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
```

a

0;

0

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.

1 (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Pavco, P., McSwiggen, for the treatment of diseases or conditions
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 5382 20-MAY-2003;
Location/Qualifiers
                                              1 (bases 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 4920 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 5032 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                              Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 1; Length 17;
                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                           3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
ative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 5092 from patent US 6566127. AR327690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 5382 from patent US 6566127. AR327980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.2; DB :
Pred. No. 6e+02;
                                                                                                                                                                                        /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                         /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR327690.1 GI:33713498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR327980.1 GI:33713788
                                                                                                                                                                                                                                                                                                 831 CTCTTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCTCCAACTCAGGG 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%;
                                                                                                                                                                                                                                                                                                                                  1 crccrectricrcran
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cccceccaccicades 17
                                                                                                                                                                                                                                                              13; Conservative
                Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unclassified.
                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                       RESULT 892
                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 893
                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                 REFERENCE
                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                    AR327690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR327980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
```

```
0;
                                                                                                                                  PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 17-AUG-2003
                                                                                                                                                                                                                                               1 (bases 1 to 17)
Pavco.P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 6584 20-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (bases 1 to 17)
Pavco, P., McSwiggen, J.A., Stinchcomb, D.T. and Escobedo, J. McSwiggen, For the treatment of diseases or conditions related to levels of vascular endethelial growth factor receptor Patent: US 6566127-A 6589 20-MAY-2003;
 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
   Indels
 3;
                                                                                                                          Sequence 6584 from patent US 6566127,
AR329182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 6671 from patent US 6566127. AR329269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR329187 17 bp RNA Sequence 6589 from patent US 6566127.
 Mismatches
                                                                                                                                                                                                                                                                                                                                        1. .17
/organism="unknown"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .17
/organism="unknown"
                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
0;
                                                                                                                                                                           AR329182.1 GI:33714990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR329187.1 GI:33714995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR329269.1 GI:33715077
                             866
                                                                                                                                                                                                                                                                                                                                                                                                                                                           843 CTGAAGACAGCGTCCT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        850 CAGCGICCIGGCICCA 865
                                                        17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 creaseacaecracr 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATCGTCATGGATCCA 17
                             851 AGCGTCCTGGCTCCAG
                                                  2 AGCCTACTGGCTCCTG
13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                      Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR329187
                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                   Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 896
AR329269
                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                             DEFINITION
                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 895
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
Matches
                                                                                                   RESULT 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                AR329182
LOCUS
                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR329187
                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                       SOURCE
                             ð
                                                       셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

PAT 17-AUG-2003

ORGANISM

REFERENCE AUTHORS TITLE

JOURNAL

FEATURES

```
1 (bases 1 to 17)
St. George-Hyslop, P.H., Rommens, J.M. and Fraser, P.E.
Transgenic mice expressing human presentlin proteins
Patent: US 6395960-A 164 28-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
Unclassified.
Unclassified.
Beigelmans.L., Burgin,A.B., Beaudry,A., Karpeisky,A.,
Matulic-Adamic,J., Sweedler,D. and Zinnen,S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        y Match 3.9%; Score 11.2; DB 1; Length 17; Local Similarity 81.2%; Pred. No. 6e+02; hes 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR398181 17 bp RN
Sequence 562 from patent US 6617438.
AR398181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR372680 17 bp Di Sequence 164 from patent US 6395960.
                                                                                                                                                                                                               Unclassified.

1 (bases 1 to 17)
Sheppard,D. and Pytela,R.
Methods of decreasing cell adhesion
Patent: Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                AR360089 17 bp
Sequence 9 from patent US 6596277.
AR360089
                                                                                                                                                                                                                                                                                                                      1. .17
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AR398181.1 GI:40135785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR372680.1 GI:34610020
                                                                                                                                                   AR360089.1 GI:33766958
                                                                                                                                                                                                                                                                                                                                                                                                                                                        838 CTTCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CATCTCCACCACGTTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATCTCCGAAGACGGC 16
13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                     Best_Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 900
AR372680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                   AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                    RESULT 899
AR360089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR398181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 17-AUG-2003
                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                         PAT 17-AUG-2003
                   Unclassified.

1 (bases 1 to 17)

Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.

Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6566127-A 6671 20-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17; ilarity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch 3.9%; Score 11.2; DB 1; Length 17; l Similarity 81.2%; Pred. No. 66+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 17)
Sheppard, D. and Pytela, R.
Methods of detecting .alpha.v.beta.6 ligands
Patent: US 6576432-A 8 10-JUN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 17)
Sheppard, D. and Pytela, R.
Methods of decreasing cell adhesion
Patent: US 6596277-A 8 22-UUL-2003,
Location/Qualifiers
                                                                                                                                                 /organism="unknown"
/wol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 8 from patent US 6596277.
AR360088
AR360089.1 GI:33766957
                                                                                                                                                                                                                                                                                                                                                                                    Sequence 8 from patent US 6576432.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                          AR342488.1 GI:33737504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 838 CTTCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        838 CTTCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                         873 CACTITICITGAGATGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATCTCCGAAGACGGC 16
                                                                                                                                                                                                                                                                                                      CACTTACCTGAGGAGC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
Unclassified.
                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown
                                                                                                                                                                                                                                                                                                        7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
```

0;

Gaps

0

DEFINITION

ACCESSION

VERSION KEYWORDS

RESULT 897

à ПЪ AR342488 LOCUS

ORGANISM

SOURCE

AUTHORS TITLE JOURNAL

FEATURES

REFERENCE

PAT 12-SEP-2003

linear

0

Gaps

. 0

DEFINITION

LOCUS

ACCESSION

RESULT 898 AR360088

à g SOURCE ORGANISM

KEYWORDS

VERSION

REFERENCE AUTHORS TITLE JOURNAL

FEATURES

ò

PAT 18-DEC-2003

linear

```
AR408827.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR408826
                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                 AR408826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16
                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                    AR408826/c
LOCUS
                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                  AR408825/c
                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 906
AR408827/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                    RESULT 904
                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 905
                                                                        ACCESSION
                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                    REFERENCE
                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                          0;
                                                                                                                                                                                                                                             PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 17)
Akhtar.S., Fell, P. and McSwiggen, J.A.
Brymatic nucleic acid treatment of diseases of conditions related to levels of epidermal growth factor receptors
Patent: US 6623962-A 271 23-SEP-2003;
Location/Qualifiers
                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                              Unclassified.

1 (bases 1 to 17)

Beigelman,L., Burgin,A.B., Beaudry,A., Karpeisky,A.,
Matulic-Adamic,J., Sweedler,D. and Zinnen,S.
Oligoribonucleotides with enzymatic activity
Patent: US 6617438-A 888 09-SEP-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                            linear
                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
Oligoribonucleotides with enzymatic activity Patent: US 6617438-A 562 09-SEP-2003; Location/Qualifiers
                                                                                          Query Match 3.9%; Score 11.2; DB 1;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                            RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 271 from patent US 6623962. AR401931. GI:40149381
                                                                                                                                                                                                                                         AR398507 17 bp R
Sequence 888 from patent US 6617438.
                                                                                                                                                                                                                                                                                                                                                                                                                             1. .17
/organism="unknown"
/mol_type="unassigned RNA"
                                                                   /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic DNA"
                                                      /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
                                                                                                                                                                                                                                                                              AR398507.1 GI:40136387
                                                                                                                                              742 TGGTAGGGTCCCAGGG 757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  826 TGTGTCTTTTCTTC 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     747 GGGTCCCAGGGTCCCT 762
                                                                                                                                                                         redresses ceses 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16 régérésérririerre 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 GGGATCCAGAGTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                   AR398507
                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                       Unknown
                                                                                                                                                                      Н
                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 903
AR401931/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
 TITLE
JOURNAL
                                                                                                                                                                                                               RESULT 902
AR398507/c
                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
                                                                                                                                                                      d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
```

```
PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 18-DEC-2003
                                                                                                                    Unknown.
Unclassified.
1 (bases 1 to 17)
Brennan,T.M., Chatelain,F. and Berninger,M.
Method and apparatus for performing large numbers of reactions using array assembly with releasable primers
Patent: US 6632641-A 20 14-OCT-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unitable to 17)

Brennan, T. M., Chatelain, F. and Berninger, M.
Brennan, T. M., Chatelain, F. and Berninger, M.
Method and apparatus for performing large numbers of reactions using array assembly with releasable primers
Patent: US 6632641-A 21 14-OCT-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
Unclassified.
1 (bassified.
Brennan,T.M., Chatelain,F. and Berninger,M.
Method and apparatus for performing large numbers of reactions using array assembly with releasable primers
                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                      .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; artive 0; Mismatches 3; Indels
      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR408826 17 bp D
Sequence 21 from patent US 6632641.
AR408825 17 bp Sequence 20 from patent US 6632641. AR408825.1 GI:40159226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 bp 1
Sequence 22 from patent US 6632641.
AR408827
                                                                                                                                                                                                                                                                                                            /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR408826.1 GI:40159227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GI:40159228
                                                                                                                                                                                                                                                                                                                                                                                                                                                          818 GGGTTGGCTGTCTC 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            818 GGGTTGGCTGTCTC 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16 dedraderedrarer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   dedrederedrerer 1
                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
```

```
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
JOURNAL
FEATURES
                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                    RESULT 910
AR433789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 911
                       DEFINITION
                                                                                                                 AUTHORS
TITLE
JOURNAL
                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR434002
                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 18-DEC-2003
                                                                                             0
                                                                                                                                                                                                    PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 (bases 1 to 17)
Brennan, T.M., Chatelain, F. and Berninger, M.
Method and apparatus for performing large numbers of reactions using array assembly with releasable primers
Patent: US 6632641—A 29 14-OCT-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                    Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
JOURNAL Patent: US 6632641-A 22 14-OCT-2003;
Location/Qualifiers
Location/Qualifiers
1. 17
/organism="unknown"
                                                                                                                                                                                                    AR408834 17 bp 1
Sequence 29 from patent US 6632641.
AR408834.1 GI:40159235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 8 from patent US 6639056. AR412307. GI:40167375
                                                                                                                                                                                                                                                                                                                                                                                /organism="unknown"
/mol_type="genomic DNA"
                                              /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  818 GGGTTGGCTGTCTC 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTCTCTGAAGACAGC 853
                                                                                                                       818 GGGTTGGCTGTGTCTC 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ederederedrerer 2
                                                                                                                                         16 GGGGGGGGGGGGGCTC 1
                                                                                                                                                                                                                                                                                       Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17
                                                                                                                                                                              RESULT 907
AR408834/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR412307
                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
```

RESULT 909

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                     ö
PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                           Ouery Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (Gases 1 to 17)

Gu, Y. and Shannon, M.E.

Isoforms of human pregnancy-associated protein-E
Patent: US 6656700-A 425 02-DEC-2003;

Location/Qualifiers
1 . .17

/crganism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 17)
Gu,Y. and Shannon,M.E.
Isoforms of human prepnancy-associated protein-E
Patent: US 6656700-A 212 02-DEC-2003;
Location/Qualifiers
                                                                                                                                                              1 (bases i to 17)
Gu, Y. and Shannon, M.E.
Isoforms of human pregnancy-associated protein-E
Patent: US 6656700-A 211 02-DEC-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp Dl
Sequence 425 from patent US 6656700.
AR434002.
AR434002.1 GI:40196845
  17 bp DN
Sequence 211 from patent US 6656700
AR433788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 bp Dl
Sequence 212 from patent US 6656700.
AR433789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                      /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR433789.1 GI:40196632
                                                           AR433788.1 GI:40196631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   951 AAGAAGAGCCAAATTG 966
                                                                                                                                                                                                                                                                                                                                                                                                                               951 AAGAAGAGCCAAATTG 966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 AAGAAGCATCAAATTG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 AAGAAGCATCAAATTG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unclassified.
                                                                                                                            Unknown.
Unclassified.
```

```
Best Local Similarity
                          AX029329
AX029329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
        DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 915
AX133961/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 916
AX133962/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                           JOURNAL
                                                                                                       REFERENCE
                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                     .
0
                                                                                                                                                         PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 07-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kuchler, K., Piper, P. and Van Rooijen, R.J.
Improved yeast strain
Patent: WO 9951746-A 4 14-OCT-1999;
KUCHLER KARL (AT); PIPER PETER (GB); DSM NV (NL); ROOIJEN RUTGER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Saccharomyces cerevisiae (baker's yeast)
Saccharomyces cerevisiae
Eukaryota; Fungi; Ascomycota; Saccharomycotina; Saccharomycetes; Saccharomycetales; Saccharomyces
                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                 .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Primer pdr12-31, pag 13 of application"
           Length 17;
                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
ative 0; Mismatches 3; Indels
                                  3; Indels
                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                             1 (bases 1 to 17)

Gu, Y. and Shannon, M.E.
Isoforms of human pregnancy-associated protein-E
Patent: US 6656700-A 428 02-DEC-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Saccharomyces cerevisiae"
/mol_type="unassigned_DNA"
/db_xref="taxon:4932"
        Score 11.2; DB 1;
Pred. No. 6e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                        AR434005
Sequence 428 from patent US 6656700.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4 from Patent W09951746.
AX015299
                                                                                                                                                                                                                                                                                                                                1. .17
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                             ,0
                                                                                                                                                                                           AR434005.1 GI:40196848
                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX015299.1 GI:10041289
                                                                                                                                                                                                                                                                                                                                                                                                                                        827 GIGICICITITICITCI 842
      3.9%;
81.2%;
                                                                                   2 creregercricit 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       875 CTTTCCTGAGATGCAC 890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 Gregorcricitrici 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTGCATGAGATGCAC 2
                                                            825 CTGTGTCTTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 81.23
Matches 13; Conservative
                                 13; Conservative
                                                                                                                                                                                                                                    Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (NL)
      Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                       AR434005
                                                                                                                                                                                   AR434005
                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JAN VAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17
                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 913
AX015299/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                         RESULT 912
AR434005
LOCUS
                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                    JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                            δ
                                                                                   임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
```

RESULT 914 AX029329/c

```
PAT 16-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 15-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 15-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Brennan, T.M., Chatelain, F. and Berninger, M.
Method and apparatus for performing large numbers of reactions using array assembly
Patent: WO 0127327-A 20 19-APR-2001;
Protogene Laboratories, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                   Zhou,J. and Frazer,I.
Nucleic acid sequence and method for selectively expressing a protein in a target cell or thasue Patent: WO 9902694-A 32 21-DAM-1999;
ZHOU JIAN (AU); FRAZER IAN (AU); UNIV QUEENSLAND (AU)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                                                                                                                                                                                     /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Oligonucleotide specific for Thr(ACA)"
                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
AX029329
17 bp
Sequence 32 from Patent WO9902694.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 from Patent WO0127327. AX133961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 21 from Patent W00127327.
AXI33962
AXI33962.1 GI:14139903
                                                           AX029329.1 GI:10190180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX133961.1 GI:14139902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     818 GGTTGGCTGTGTCTC 833
                                                                                                                                               artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 rrcrcrrcrcaagaca 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GGGTGGGTGTCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                   synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               836 TICITCICIGAAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
```

0

Gaps

· 0

Indels

3;

Length 17;

PAT 07-SEP-2001

linear

RNA

```
Blatt,L., Mcswiggen,J. and Chowrira,B.M.
Method and reagent for the modulation and diagnosis of cd20 and
Method and reagent for the modulation and diagnosis of cd20 and
pacent so o159103-A 1106 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                  Blatt,L., Mcswiggen,J. and Chowrira,B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                nogo gene expression
Patent: WO 0159103-A 259 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US) McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                      ch 3.9%; Score 11.2; DB 1; Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="synthetic construct"
|mol_type="unassigned RNA"
|do_type="unassigned"
|note="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX215664 17 bp R1
Seguence 1106 from Patent WO0159103
AX215664
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                   AX214817
Sequence 259 from Patent W00159103.
AX214817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="Nucleic Acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX215664.1 GI:15525707
                                                                                                                                                                                                                                                                                                                       AX214817.1 GI:15524860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          973 TAAATCTGGTGTATGG 988
                                                                                                                                    818 GGGTTGGCTGTGTCTC 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 radarcrecaercade 2
                                                                                                                                                                       17 degrederedrároro 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 920
AX215664
                                                                                                                                                                                                                                                 AX214817/c
                                                                                                                                                                                                                              RESULT 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 15-MAY-2001
                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 15-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Brennan, T.M., Chatelain, F. and Berninger, M. Method and apparatus for performing large numbers of reactions using array assembly Patent: WO 0127327-A 22 19-APR-2001; Protogene Laboratories, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Brennan, T.M., Chatelain, F. and Berninger, M.
Method and apparatus for performing large numbers of reactions using array assembly
Patent: WO 1017327-A 29 19-APR-2001;
Protogene Laboratories, Inc. (US)
Location/Qualifiers
           1
Brennan, T.M., Chatelain, F. and Berninger, M.
Method and apparatus for performing large numbers of reactions using array assembly
Patent: WO 0127327-A 21 19-APR-2001;
Protogene Laboratories, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.2; DB 1; Length 17; 11.2%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                      .
ن
                                                                                                                                                                                                                                Query Match 3.9%; Score 11.2; DB 1; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 29 from Patent W00127327. AX133970
                                                                                                                                                                                                                                                                                                                                                                                                                                      17 bp
Sequence 22 from Patent W00127327.
AX133963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX133963.1 GI:14139904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX133970.1 GI:14139911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              818 GGGTTGGCTGTGTCTC 833
                                                                                                                                                                                                                                                                                                           818 GGGTTGGCTGTGTCTC 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGGTGGTGGTGTCTC 1
                                                                                                                                                                                                                                                                                                                                               16 GGGTGGGTGTGTCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16
                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 918
AX133970/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                           AX133963/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                               AUTHORS
                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

· 0

Gaps

ò

PAT 07-SEP-2001

linear

RNA

0

Gaps

·.

```
AX217335
                                  AX217335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 924
AX227528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 925
AX227686/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                     REFERENCE
                                                                                                                                    AUTHORS
                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                      PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 07-SEP-2001
                                                                                                                                                                                                                              Blatt, L., Mcswiggen, J. and Chowrira, B.M. Method and reagent for the modulation and diagnosis of cd20 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Blatt,L., Mcswiggen,J. and Chowrira,B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 2776 16-AUG-2001;
RIBOZYME PHARMACEUTCALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                      Patent: WO 0159103-A 2368 16-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Blatt, Lawrence (US)
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                     Score 11.2; DB 1; Length 17; Pred. No. 6e+02; 3; Indels 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                              /organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/noE="Nucleic Acid"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
/note="Nucleic Acid"
                                                                                                      RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA
                                                                                                AX216926 17 bp Ri
Seguence 2368 from Patent WO0159103.
AX216926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX217334 17 bp Ru Sequence 2776 from Patent WO0159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX217334
AX217334.1 GI:15527395
                                                                                                                                          AX216926.1 GI:15526987
951 AAGAAGAGCCAAATTG 966
                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            760 CCTAGGCCTCCACTTC 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         783 AGCCCCTCTGGTGCCA 798
                        1 AAGAAGGCCCAAATAG 16
                                                                                                                                                                                     synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 AGCCTCTTTGCTGCCA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 CCTCGTCCTCTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  synthetic construct artificial sequences.
                                                                                                                                                                        synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.99
Best Local Similarity 81.29
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX217334
                                                                                                                                                                                                                                                                                                                                  Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                  AX216926/c
                                                                                                LOCUS
                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                   RESULT 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 92
AX217334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
```

RESULT 923 AX217335

```
PAT 07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk
                                                                                                                                                                                        Blatt, L., Mcswiggen, J. and Chowrira, B.M.
Method and reagent for the modulation and diagnosis of cd20 and nogo gene expression
Patent: WO 0159103-A 2777 16-AUG-2001;
RIBOZYME PHARMACEUTIAALS, INC. (US); Blatt, Lawrence (US);
McSwiggen, James (US); Chowrira, Bharat M. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1) enzyme
Patent: WO 0157206-A 900 09-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US) ; Fattaey, Ali R. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 66+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; 1ve 0; Mismatches 3; Indels
  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                              1..17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
  RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RNA
AX217335 17 bp R1
Sequence 2777 from Patent WO0159103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX227686 17 bp R1
Sequence 1058 from Patent WO0157206.
AX227686.1 GI:15556827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX227528
Sequence 900 from Patent WO0157206.
                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="Nucleic Acid"
                                                             AX217335.1 GI:15527396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX227528.1 GI:15556669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    783 AGCCCCTCTGGTGCCA 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 934 TCCAGAGAATTTTACG 949
                                                                                                    synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 AGCCTCTTTGCTGCCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAGAAATATTAAG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
```

```
16 gerrescrerencier 1
                                                                             16 GGACCCCAAGGTCCCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                         Homo sapiens (human)
Query Match 3.99
Best Local Similarity 81.23
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                          1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 929
AX262901/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                     RESULT 928
                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                           VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                     AX262900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                              ò
                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 05-0CT-2001
                                                                                                                                                                                                                                                                                                                                   PAT 10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fattaey, A.R., Jarvis, T., Mcswiggen, J., Booher, R.N. and Holman, P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk
   Fattaey,A.R., Jarvis,T., Mcswiggen,J., Booher,R.N. and Holman,P.S. Method and reagent for the inhibition of checkpoint kinase-1 (chk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                Gaps

    enzyme
    Patent: WO 0157206-A 1095 09-AUG-2001;
    RIBOZYME PHARMACEUTICALS, INC. (US); Fattaey, Ali R. (US)
    Location/Qualifiers

                                  1) enzyme
Patent: WO 0157206-A 1058 09-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); Fattaey, Ali R. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                3.9%; Score 11.2; DB 1; Length 17; ilarity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gorczynski, R.M. and Clark, D.A.
Methods and compositions for immunoregulation
Patent: WO 0168697-A 3 20-SEP-2001;
Gorczynski, Reginald M. (CA); Clark, David A. (CA)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .17
/organism="synthetic construct"
/mol_type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/noce="ODN-3"
                                                                                           1. .17
/organism="synthetic construct"
/mol type="unassigned RNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                   RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                             Sequence 1095 from Patent WO0157206.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3 from Patent W00168697.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX252317.1 GI:15985652
                                                                                                                                                                                                                                                                                                                                                                              AX227723.1 GI:15556864
                                                                                                                                                                                                                              803 CTCTCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               834 TITICICICAAGA 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCTCTTCTCTTCAGA 1
                                                                                                                                                                                                                                                          17 crcrccrccacada 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                  Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16
                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX252317/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                     AX227723/c
                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                     RESULT 926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
       AUTHORS
                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                               FEATURES
                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                      LOCUS
```

ŏ

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 26-OCT-2001
                                               ö
                                                                                                                                                                                                                                                               PAT 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Batent: WO 0173002-A 292 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: WO 0173002-A 291 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·;
                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.2; DB 1; Length 17; llarity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
3.9%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
  Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                               linear
                                            3; Indels
3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX262901 17 bp I
Sequence 292 from Patent WO0173002.
AX262901

    .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                            AX262900 17 bp 1
Sequence 291 from Patent WO0173002.
AX262900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX262901.1 GI:16511700
                                                                                                                                                                                                                                                                                                                                  AX262900.1 GI:16511699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                819 GGTTGGCTGTGTCTCT 834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 819 GGTTGGCTGTGTCT 834
                                                                                              747 GGGTCCCAGGGTCCCT 762
```

```
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                        AX263393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX263608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX263608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local
Matches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 934
AX263608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                 AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                             RESULT 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                         AX263393
                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                   PAT 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 26-OCT-2001
                                                                                                  Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                        Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: WO 0173002-A 523 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single stranded oligonucleotides
Patent: Wo 0173002.A 524 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                     ch 3.9%; Score 11.2; DB 1; Length 17; ll Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 17;
                  linear
                                                                                                                                                                                                                                                                                                                                                  3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
trive 0; Mismatches 3;
                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                  AX263132
Seguence 523 from Patent WO0173002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 783 from Patent WO0173002.
AX263392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX263133
Sequence 524 from Patent WO0173002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Homo sapiens"
                                                                                                                                                                                                                   Y OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                         AX263132.1 GI:16511931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX263133.1 GI:16511932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX263392.1 GI:16512191
                                                                                                                                                                                                                                                                                                                                                                              862 TCCAGTTGGAACACTT 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                862 TCCAGTIGGAACACIT 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rccarrrgraaracrr 17
                                                                                                                                                                                                                                                                                                                                                                                                    16 TCCATTTGTAATACTT 1
                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
               AX263132
                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                   source
AX263132/c
LOCUS
                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX263392/c
                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                      KEYWORDS
                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX263133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
```

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 26-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 26-OCT-2001
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                      Kmiec,E.B., Gamper,H.B. and Rioe,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: Wo 0173002-A 783 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kmiec, E.B., Gamper, H.B. and Rice, M.C.
Targeted chromosomal genomic alterations with modified single stranded oligonucleotides
Patent: WO 0173002.4 784 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonuclectides
Patent: WO 0173002-A 959 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                               Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                  1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX263393 17 bp
Sequence 784 from Patent WO0173002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="unassigned_DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 999 from Patent W00173002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX263393.1 GI:16512192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX263608.1 GI:16512407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          874 ACTITCCTGAGATGCA 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    874 ACTITICCIGAGAIGCA 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 ACTITCCTGAGTGCCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 ACTITICCIGAGIGCCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
```

PAT 26-0CT-2001

```
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                      Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: WO 0173002-A 3682 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                       Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: WO 0173002-A 2003 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ch 3.9%; Score 11.2; DB 1; Length 17; 1 Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX266292 17 bp Di
Sequence 3683 from Patent WO0173002.
                                                                                                                  AX264612 17 bp DI
Sequence 2003 from Patent WO0173002.
AX264612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX266291 17 bp D
Sequence 3682 from Patent WO0173002.
                                                                                                                                                                                                                                                                                                                                                                                                                      1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

    .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX266291
AX266291.1 GI:16515090
                                                                                                                                                                                 AX264612.1 GI:16513411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      878 TCCTGAGATGCACTTA 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             862 TCCAGTTGGAACACTT 877
878 TCCTGAGATGCACTTA 893
                                  1 rccreaagrecacrea 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 recerredaakeat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX266292
LOCUS
DEFINITION S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                       RESULT 937
AX264612/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX266291/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 939
                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 938
                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                    KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Пр
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                g
 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 26-0CT-2001
                                                                                                                                                                                                                                                                                              PAT 26-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kmiec, B.B., Gamper, H.B. and Rice, M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: WO 0173002.A 1000 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: Wo 0173002.A 2002 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                             1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                              linear
                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                         Query Match
3.9%; Score 11.2; DB 1
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX264611 17 bp D1 Sequence 2002 from Patent WO0173002.
                                                                                                                                                                                                                                                                                              AX263609 17 bp D1
Seguence 1000 from Patent WO0173002.
AX263609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AXZ64611
AX264611.1 GI:16513410
                                                                                                                                                                                                                                                                                                                                                   AX263609.1 GI:16512408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             707 GCGAGTCCCAGGAGAG 722
                                                                                                                                                                      707 GCGAGTCCCAGGAGAG 722
                                                                                                                                                                                                      1 GAGAATCCCAGGACAG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAATCCCAGGACAG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
     1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 936
                                                                                                                                                                                                                                                                                  AX263609/c
                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                               RESULT 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX264611
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                       à
                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
```

· 0

Gaps

ö

PAT 26-0CT-2001

linear

ö

Gaps

ö

PAT 26-0CT-2001

linear

```
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                          RESULT 942
AX266807/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 943
AX266808
                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 26-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                   Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonucleotides
Patent: WO 0173002-A 3683 04-0CT-2001;
UNIVERSITY OF DELAWARE (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kmiec,E.B., Gamper,H.B. and Rice,M.C.
Targeted chromosomal genomic alterations with modified single
stranded oligonuclectides
Patent: WO 0173002-A 3958 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17; larity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 11.2%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                            17 bp Di
WO0173002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kmiec, E.B., Gamper, H.B. and Rice, M.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX266568 17 bp I Sequence 3959 from Patent WO0173002.
                                                                                                                                                                                                                                            /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                              /organism="Homo sapiens"
                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3958 from Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX266567.1 GI:16515366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AXŽ66568
AX266568.1 GI:16515367
               AX266292.1 GI:16515091
                                                                                                                                                                                                                                                                                                                                                   862 TCCAGTTGGAACACTT 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            862 TCCAGTIGGAACACTI 877
                                                                                                                                                                                                                                                                                                                                                                                TCCCCTTGGAACACGT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCAGCTGGAAGCCTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                            sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13; Conservative
                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX266567
AX266292
                                              Homo
                                                            Homo
                                                                                                                                                                                                                                                                                                                   13;
                                                                                                                                                                                                                                                                                                                                                                                N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                                                                                                                                                                                                                                        Query Match
Best Local
                                                                                                                                                                                                                  Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                            AX266567/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
ACCESSION
              VERSION
KEYWORDS
SOURCE
                                                                                                                        AUTHORS
                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX266568
                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

```
ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 26-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 26-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
Targeted chromosomal genomic alterations with modified single stranded oligonuclectides
Patent: WO 0173002-A 3959 04-OCT-2001;
UNIVERSITY OF DELAMARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kmiec, E.B., Gamper, H.B. and Rice, M.C.
Targeted chromosomal genomic alterations with modified single stranded oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Kmiec, B.B., Gamper, H.B. and Rice, M.C.
Targeted chromosomal genomic alterations with modified single stranded oligonuclectides
Batent: Wo 0173002.4 4199 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; 1ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: WO 0173002-A 4198 04-OCT-2001;
UNIVERSITY OF DELAWARE (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4198 from Patent W00173002. AX266807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 4199 from Patent W00173002. AX266808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

    17 .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX266807.1 GI:16515608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX266808.1 GI:16515609
                                                                                                                                                                                                                                                                                                                       877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        918 ATCATCACCACCC 933
                                                                                                                                                                                                                                                                                                                                                               2 rccagcrddaagccrr 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 Architeccaccacac 1
                                                                                                                                                                                                     Query Match
Best Local Similarity 81.2°,
دمات: مات: All Similarity 81.3°, دمات: مات: All Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                     862 TCCAGTTGGAACACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
```

```
AX273050.1 GI:16545787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX273105.1 GI:16545842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX423355.1 GI:21526737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   911 TCAGATTATCATCACC 926
                                                                                                                                                                                                                                                                                                                                                                                                                                            917 TATCATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 TATCTGCAGCACCACC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGTTCATCCTCACC 2
                                                                                                                Homo sapiens (numan)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX273105/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 948
AX423355
 RESULT 946
AX273050
                                                 DEFINITION
                                                                ACCESSION
VERSION
                                                                                                                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                REFERENCE
                                                                                                                                                                                              AUTHORS
                                                                                                  KEYWORDS
                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 29-0CT-2001
                                                                                                                                                                                PAT 29-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                               Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ellis, J.H.
Method and reagent for the inhibition of grid
Patent: WO 0162911-A 498 30-AUG-2001,
RIBOZYME PHREAGEUTICALS, INC. (US) ; GLAXO GROUP LIMITED (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                           Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Hamblin, P.A. and Bllis, J.H.
Method and reagent for the inhibition of grid
Patent: WO 0162911-A 394 30-AUG-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GB)
Location/Qualifiers
                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Eutele
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Hamblin, P.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17; ilarity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
Query Match
3.9%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RNA
                                                                                                                                                                                  RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                              AX272825 17 bp F
Seguence 394 from Patent WO0162911.
AX272825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp
Sequence 495 from Patent W00162911.
AX272926
AX272926.1 GI:16545663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                AX272825.1 GI:16545562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          917 TATCATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                880 CTGAGATGCACTTACT 895
                                                                  918 ATCATCACCACCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 CTGAAATGCAGTAACT 17
                                                                                                2 Arcarreceaecaeae 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATCTGCAGCACCACC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                              Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 945
AX272926
                                                                                                                                                  RESULT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                 AX272825
                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         dd
                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 29-OCT-2001
  PAT 29-OCT-2001
                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                          Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Hamblin,P.A. and Ellis,J.H.
Method and reagent for the inhibition of grid
Patent: WO 0162911-A 619 30-AUG-2001;
RIBOZYNE PHRAMACEUTICALG, INC. (US); GLAXO GROUP LIMITED (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Hamblin, P.A. and Ellis, J.H.
Method and reagent for the inhibition of grid
Patent: WO 0162911-A 674 30-AUG-2001;
RIBOZYME PHRAMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GB)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match

3.9%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match

3.9%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 6e+02;

Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RNA
     RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX423355 17 bp RN
Sequence 1691 from Patent WO0188124.
AX423355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX273105 17 bp F
Sequence 674 from Patent WO0162911.
AX273105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
AX273050 17 bp 1
Seguence 619 from Patent W00162911.
AX273050
                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
```

rge.res

```
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            unidentified unclassified.
                                                                                                                     Local Similarity
les 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX428782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX428782
                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 952
AX428782
                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                     AX427052/c
                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                    Matches
                                                                                                                                                                                                                                                  RESULT 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 18-JUN-2002
               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jarvis, T., von Carlowitz, I., Mcswiggen, J.A., Mclaughlin, F.G. a Randi, A.M. Method and reagent for the inhibition of erg Patent: WO 0188124-A 2007 22-NOV-2001; RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GB)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                           Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Mclaughlin,F.G. Randi,A.M.
Method and reagent for the inhibition of erg
Patent: WO 0188124-A 1691 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jarvis,T., von Carlowitz,I., Mcswiggen,J.A., Mclaughlin,F.G.
Randi,A.M.
Method and reagent for the inhibition of erg
Patent: WO 0188124-A 2006 22-NOV-2001;
RIBOZYME PHARMACEUTICALS, INC. (US); GLAXO GROUP LIMITED (GR
Location/Qualifiers
                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                 DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                          3.9%; Score 11.2; DB 1
81.2%; Pred. No. 6e+02;
ttive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                 RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RNA
                                                                                                                                                                                                                                                                                                                                                                                                                              AX423670 17 bp R1
Sequence 2006 from Patent WO0188124.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2007 from Patent W00188124. AX423671
                                                                                                                                                                             /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX423670.1 GI:21527052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX423671.1 GI:21527053
                                                                                                                                                                                                                                                                                                              733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      715 CAGGAGAGTGACTCTG 730
                                                                                                                                                                                                                                                                                                                                           2 GAGAGAGACTGTGGCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                            718 GAGAGTGACTCTGGTC
                                                                                                                                                                                                                                          Query Match
Best Local Similarity 81.24
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13; Conservative
   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX423670
                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 950
AX423671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                              RESULT 949
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                               REFERENCE
                                                                AUTHORS
                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                           AX423670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                           유
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                  PAT 18-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bee, G., Kohne, D.E., Korb, L., Peterson, T. and Yguerabide, J. Assay for genetic polymorphisms using scattered light detectable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Van Doorn, L.J., Kleter, B. and Ter Schegget, J.
Detection and identification of human papillomavirus by pcr and
type-specific reverse hybridization
Patent: EP 1201771 A 181 02-MAY-2002;
INNOGENETICS N.V. (BE) ; Delfts Diagnostic laboratory B.V. (NL)
Location/Qualifiers
                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="synthetic construct"
Mol_type="unassigned DNA"
/db_xref="taxon:326590"
/noTe="Exemplary probe for CYP2D6 allele detection"
                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                              3.9%; Score 11.2; DB 1; Length 17; ilarity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ch 3.9%; Score 11.2; DB 1; Length 17;
l Similarity 81.2%; Pred. No. 6e+02;
13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          labeis
Patent: WO 0196604-A 16 20-DEC-2001;
Genicon Sciences Corporation (US)
/organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX428782 17 bp 1 Sequence 181 from Patent EP1201771.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                             AX427052 17 bp
Sequence 16 from Patent WO0196604.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                     AX427052.1 GI:21530435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX428782.1 GI:21538693
                                                                                                                                                                                              731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                         1 ACGAGAGACACTGTGG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 caggaccccacctc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct synthetic construct
                                                                                                                                                                                         716 AGGAGAGTGACTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13; Conservative
```

Mon Jul 12 11:21:14 2004

rge.res

```
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                         Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhang,J.
Human kidney tumor overexpressed membrane protein 1
Human kidney tumor overexpressed membrane protein 1
Patent: WO 0224750-A 273 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zhang,J.

Human kidney tumor overexpressed membrane protein 1

Patent: WO 0224750-A 272 28-MAR-2002;

Aeomica, Inc. (US)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                         Zhang, J.

Human kidney tumor overexpressed membrane protein
Patent: WO 0224750-A 271 28-MAR-2002;
Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX475051 17 bp I Sequence 272 from Patent W00224750. AX475051. GI:22214336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX475052 17 bp 1
Sequence 273 from Patent WO0224750.
AX475052
                                                                                                                                                                                                     1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX475052.1 GI:22214337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           746 AGGGTCCCAGGGTCCC 761
                                                                                                                                                                                                                                                                                                                                                                   746 AGGGTCCCAGGGTCCC 761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGCCCCATGGCCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                    17 AGGGCCCCATGGCCCC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo saplens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 956
AX475051/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 957
AX475052/c
LOCUS
                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                     SOURCE
ORGANISM
                                                                                         REFERENCE
AUTHORS
                                                                                                                              TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
KEYWORDS
                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 12-AUG-2002
                                                                                                                              PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 12-AUG-2002
                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                Zhang, J.
Human Kidney tumor overexpressed membrane protein 1
Human Kidney tumor overexpressed membrane protein 1
Patent: WO 0224750-A 108 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhang,J.
Human kidney tumor overexpressed membrane protein 1
Patent: WO 0224750-A 110 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX475050
Sequence 271 from Patent W00224750.
AX475050
AX475050.1 GI:22214335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 110 from Patent WO0224750.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1...17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                          17 bp I
Sequence 108 from Patent WO0224750.
AX474887
                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX474889.1 GI:22214174
                                                                                                                                                                                       AX474887.1 GI:22214172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              751 CCCAGGGTCCCTAGGC 766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    752 CCAGGGTCCCTAGGCC 767
       859 GGCTCCAGTTGGAACA 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 CCCAGCGTCCCGTGGC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccadcerceceredec 16
                            1 GGCATCTGTTGGAACA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX475050/c
LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                 DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
ORGANISM
                                                                                               RESULT 953
AX474887
                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 954
AX474889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 955
```

PAT 12-AUG-2002

0

Gaps

.. 0

REFERENCE AUTHORS JOURNAL

SOURCE

LOCUS

ð 임 FEATURES

0;

Gaps

. 0

REFERENCE AUTHORS

LOCUS

à

JOURNAL

ð g

TITLE

PAT 12-AUG-2002

rge.res

```
Best Local Similarity
Matches 13; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX475306
                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                      DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                              RESULT 960
AX475189/c
                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 961
AX475306/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                    SOURCE
                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                       0
                                                                                                                                                                                                                                        PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                          Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                          Length 17;
                                                                                                                                                                                                                                                                                                                                                                                   Zhang,J.
Human kidney tumor overexpressed membrane protein 1
Patent: Wo 0224750-A 274 28-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhang,J.
Human kidney tumor overexpressed membrane protein 1
Patent: WO 0224750-A 409 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                        linear
                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                     Query Match 3.9%; Score 11.2; DB 1; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
          /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                Sequence 274 from Patent W00224750. AX475053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX475188 17 bp 1
Sequence 409 from Patent W00224750.
AX475188 AX475188.1 GI:22214473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                             Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                               AX475053.1 GI:22214338
                                                                                                                                752 CCAGGGTCCCTAGGCC 767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                752 CCAGGGTCCCTAGGCC 767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              786 CCTCTGGTGCCAAGA 801
                                                                                                                                                17 CCAGGCCCCCATGGCC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCAGGGCCCCATGGCC 1
                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
1, .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16
                                                                                                                                                                                                                                                DEFINITION
ACCESSION
 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 959
AX475188/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                    RESULT 958
AX475053/c
LOCUS
                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                             VERSION
                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 12-AUG-2002
                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cch 3.9%; Score 11.2; DB 1; Length 17; 11 Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                 Zhang, J.

Human kidney tumor overexpressed membrane protein 1
Patent: WO 0224750-A 410 28-MAR-2002;
Aeomica, Inc. ('US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zhang,J.
Human kidney tumor overexpressed membrane protein 1
Patent: WO 0224750-A 527 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                          17 bp 1
Sequence 410 from Patent W00224750.
AX475189
                                                                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 527 from Patent W00224750.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX475308 17 bp 1
Sequence 529 from Patent W00224750.
AX475308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 bp
                                                                                                                                                            AX475189.1 GI:22214474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX475306
AX475306.1 GI:22214591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX475308.1 GI:22214593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        786 CCCTCTGGTGCCAAGA 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             806 TCCTCCAACTCAGGGT 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 CCCTGTGGGGCCAGGA 1
                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 recrecaarcaeer 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
17 CCCTGTGGGGCCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 962
AX475308/c
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
```

```
16 AGAGCAGCCCCTGAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                Aeomica,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Simil
Matches 13; C
                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                             RESULT 965
AX475589/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX475590/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 966
                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 12-AUG-2002
                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                   PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                              ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                             Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhang,J.

Human kidney tumor overexpressed membrane protein 1
Patent: WO 0224750-A 559 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zhang,J.

Human kidney tumor overexpressed membrane protein 1

Patent: WO 0224750-A 561 28-MAR-2002;

Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                        Zhang, J.

Human kidney tumor overexpressed membrane protein
Patent: WO 0224750-A 529 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX475340 17 bp L
Sequence 561 from Patent W00224750.
AX475340
                                                                                                                                                                                                                                                                                                                                                                                  AX475338 17 bp I Sequence 559 from Patent W00224750.
AX475338

    .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                        1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX475340.1 GI:22214625
                                                                                                                                                                                                                                                                                                                                                                                                                               AX475338.1 GI:22214623
                                                                                                                                                                                                                                                                           805 CICCICCAACICAGGG 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         776 TGAGGGCAGCCCCTCT 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 TGAGAGGAGCTCCTCT 2
                                                                                                                                                                                                                                                                                                      16 crecrecaarcage 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
Homo sapiens
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX475340/c
LOCUS
                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                      RESULT 963
AX475338/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 964
 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                              ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 12-AUG-2002
                                                                                                      ö
                                                                                                                                                                                                                                                                                               PAT 12-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 81.2%; Pred. No. 6e+02; Similarity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhang,J.
Human kidney tumor overexpressed membrane protein 1
Patent: WO 0224750-A 810 28-MAR-2002;
                                                                Length 17;
                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zhang, J.

Human kidney tumor overexpressed membrane protein
Patent: WO 0224750-A 811 28-MAR-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                      3; Indels
                                                                1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                            Query Match 3.9%; Score 11.2; DB 1
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX475590 17 bp I
Sequence 811 from Patent WO0224750.
AX475590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
/mol_type="unassigned DNA" /db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                   AX475589 17 bp
Sequence 810 from Patent W00224750.
AX475589.1 GI:22214874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX475590.1 GI:22214875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                778 AGGGCAGCCCCTCTGG 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      778 AGGGCAGCCCCTCTGG 793
                                                                                                                                                  775 CTGAGGGCAGCCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 AGAGCAGCCCTGAGG 2
                                                                                                                                                                                          16 creaseaseascreere 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
```

·.

ó

```
Homo sapiens
                   Zhan, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zhan, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zhan, J.
                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 971
AX500675
                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                         RESULT 970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
    REFERENCE
                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                     AX500674
                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                               .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                              cch 3.9%; Score 11.2; DB 1; Length 17; Il Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human testis expressed patched like protein
Patent: EP 1229046-A 1004 07-AUG-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                   Human testis expressed patched like protein
Patent: EP 1229046-A 1003 07-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp D1
AX499697.1 GI:23381990
                       17 bp Di
Sequence 1003 from Patent EP1229046.
AX499696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1570 from Patent EP1229046. AX500263
                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                              Aeomica, Inc. (US)
Location/Qualifiers
                                                                     AX499696.1 GI:23381989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX500263.1 GI:23382556
                                                                                                                                                                                                                                                                                                                                                                      796 CCAAGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   796 CCAAGAGCICICCICC 811
                                                                                                                                                                                                                                                                                                                                                                                       17 CCAAGATGTATCCTCC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCAAGATGTATCCTCC 1
                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                       Zhan, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zhan, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16
                         LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 968
AX499697/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 969
AX500263
RESULT 967
AX499696/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . 숌
```

```
PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                Gaps
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                      Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                 Human testis expressed patched like protein
Patent: EP 1229046-A 1570 07-AUG-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Munan testis expressed patched like protein Patent: BP 1229046-A 1981 07-AUG-2002; Acomica, Inc. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human testis expressed patched like protein
Patent: EP 1229046-A 1982 07-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1981 from Patent EP1229046. AX500674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 bp Di
Sequence 1982 from Patent EP1229046.
AX500675

    .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

    .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX500674.1 GI:23382967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX500675.1 GI:23382968
                                                                                                                                                                                                                                                                                                                                                                                      917 TATCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 966 GACTCTCTAAATCTGG 981
                                                                                                                                                                                                                                                                                                                                                                                                                    1 TACAATCACCACCATC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 GACCTTCGAAATCTGG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
Homo sapiens
```

; 0

```
17 GCGCCGCTGCTGCCAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 13; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                   AX530537/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 976
AX531151
              LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
4X530535/c
                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                  JOURNAL
                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                    VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pp
                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                            ö
                                                                                                                                                                   PAT 21-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 21-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                   Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17; ilarity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
           Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gu, Y. and Corrigan, A.
Human nedd-1
Patent: WO 0226818-A 177 04-APR-2002;
                                                                                                                                                                                                                                                                                                             Gu,Y. and Corrigan,A.
Human nedd-1
Patent: WO 0226818-A 175 04-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX527147 17 bp E
Sequence 177 from Patent W00226818.
AX527147

    17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                              1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                    AX527145
Sequence 175 from Patent WO0226818.
AX527145.
AX527145.1 GI:25171760
                                                                                                                                                                                                                                                                                                                                                        Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX527147.1 GI:25171762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                955 AGAGCCAAATTGACTC 970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   954 AAGAGCCAAATTGACT 969
                                                                        966 GACTCTCTAAATCTGG 981
                                                                                                  1 GACCTTCGAAATCTGG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 ATAGCCAAAGTGGCTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                           Aeomica,
                                                                                                                                                                                DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                           RESULT 972
AX527145/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX527147/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PEATURES
                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                  d
                                                                         à
```

RESULT 974

```
..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 22-NOV-2002
  PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                         Homo sapiens
Bukaryota: Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 17;
  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human posh-like protein 1
Patent: EP 1239051-A 46 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                Shannon, M.
Human posh-like protein 1
Patent: BP 1239051-A 44 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp I
Sequence 660 from Patent EP1239051.
AX531151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                             1..17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 46 from Patent EP1239051.
17 bp
Sequence 44 from Patent EP1239051.
AX530535
                                                                                                                                                                                                                                                            Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX531151.1 GI:25254102
                                                             AX530535.1 GI:25252447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX530537.1 GI:25252451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              784 GCCCCTCTGGTGCCAA 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 783 AGCCCCTCTGGTGCCA 798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 AGCGCCGCTGCTGCCA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
```

g δ

ó

```
PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 22-NOV-2002
                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                    linear
                        3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
      ilarity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                       Human posh-like protein 1
Patent: EP 1239051-A 718 11-SEP-2002;
Acomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human posh-like protein 1
Patent: EP 1239051-A 1026 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1026 from Patent EP1239051.
AX531517
                                                                                                                                                               AX531209 17 bp 1
Sequence 718 from Patent EP1239051.

    .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                               AX531209.1 GI:25254211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX531517.1 GI:25254806
                                                      851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840 TCTCTGAAGACAGCGT 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   832 TCTTTTCTTCTGAA 847
                                                                          2 TCCTTCTCCGGAGACA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 rcrcccadacactr 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 TTTGTTCTTCTAAA 2
                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                   836 TTCTTCTCTGAAGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.9°
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 81.2'
Matches 13; Conservative
                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
    Best Local Similarity
                                                                                                                                                                                                                                                                                                                             Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX531519
                     13;
                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 981
AX531519/c
LOCUS
                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 980
AX531517/c
LOCUS
                                                                                                                                                                                DEFINITION
                                                                                                                               RESULT 979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
                     Matches
                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                              KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                  AX531209
                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                             VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                        PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                          3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; artive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
             Human posh-like protein 1
Patent: EP 1239051-A 660 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human posh-like protein 1
Patent: BP 1239051-A 661 11-SEP-2002;
Acomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sudamory, ...

Haman posh-like protein 1

Patent: EP 1239051-A 713 11-SEP-2002;

Acomica, Inc. (US)

Location/Qualifiers
                                                                              1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                  Sequence 661 from Patent EP1239051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 713 from Patent EP1239051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .17
/organism="Homo sapiens"
                                              Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                  AX531152.1 GI:25254104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX531204.1 GI:25254201
                                                                                                                                                                                                                         769 CCACTTCTGAGGGCAG 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       769 CCACTTCTGAGGGCAG 784
                                                                                                                                                                                                                                                       2 CAACTACAGAGGCCAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 CAACTACAGAGGCAG 16
                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                                                                                                       Query Match 3.9%
Best Local Similarity 81.2%
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shannon, M.
 Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                   AXS31152
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                       RESULT 977
                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
SOURCE
                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX531204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
```

à

ó

```
13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Aeomica, Inc.
                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                             Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 985
AX532377
                                             source
                                                                                                                                                                                                                                                   RESULT 984
AX532241/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
 JOURNAL
                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE
                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                    Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·.
                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                              Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                               Human posh-like protein 1
Patent: EP 1239051-A 1028 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human posh-like protein 1
Patent: EP 1239051-A 1111 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1749 from Patent BP1239051.
AX532240.
AX532240.1 GI:25256267
                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1111 from Patent BP1239051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Sequence 1028 from Patent EP1239051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shannon, M.
Human posh-like protein 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX531602.1 GI:25254994
                              AX531519.1 GI:25254810
                                                                                                                                                                                                                                                                                                                                            831 CTCTTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   740 CTTGGTAGGGTCCCAG 755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 CICCGIAGGGGCCCAG 17
                                                                                                                                                                                                                                                                                                                                                          16 CTTTGTTCTTCTAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                              Homo sapiens (human)
                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shannon, M.
                                                                                                                                      Shannon, M.
                   AX531519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX532240/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
SOURCE
                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                        REFERENCE
                     ACCESSION
                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                   AX531602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  엄
                                                                                                                                                                                                                                                                                                                                             à
```

```
٠.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 22-NOV-2002
                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
3.9%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                              3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
Patent: EP 1239051-A 1749 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human posh-like protein 1
Patent: BP 1239051-A 1750 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human posh-like protein 1
Patent: EP 1239051-A 1886 11-SEP-2002;
Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 1886 from Patent EP1239051.
AX532377
                                                                                                                                                                                                                                                                                                                                                                                                                        AX532241
Seguence 1750 from Patent EP1239051.
AX532241

    1.17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                       1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX532377.1 GI:25256531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX532241.1 GI:25256269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         814 CTCAGGGTTGGCTGTG 829
                                                                                                                                                                                                                                                                       814 CTCAGGGTTGGCTGTG 829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16 CCCAGGCCGGCTGTG 1
                                                                                                                                                                                                                                                                                                              17 cccadeccederare 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
```

```
AX532417.1 GI:25256609
                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shannon, M.
                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                             RESULT 989
AX532427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
JOURNAL
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX532428
                           SOURCE
                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                          PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 22-NOV-2002
                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                 .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                      Human posh-like protein 1
Patent: EP 1239051-A 1889 11-SEP-2002;
Acomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human posh-like protein 1
Patent: EP 1239051-A 1924 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 1924 from Patent BP1239051.
                                                                                                      AX532380
Sequence 1889 from Patent EP1239051.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX532417 17 bp DN
Sequence 1926 from Patent EP1239051.
AX532417
                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                              AX532380.1 GI:25256537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX532415.1 GI:25256605
           767
                                                                                                                                                                                                                                                                                                                                                                                                                                         754 AGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         778 AGGCCACCCTCTGG 793
                                    2 ccarccriccacc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ardercerredecte 16
                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 AGGGGATCCCCTGTGG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
          752 CCAGGGTCCCTAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                              Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shannon, M.
                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX532417/c
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                            RESULT 986
                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX532415/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
                                                                                                                                 ACCESSION
                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                                                          AX532380
                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                        SOURCE
                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 22-NOV-2002
                                         Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                  Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                            Shannon,M.
Human posh-like protein 1
Patent: EP 1239051-A 1926 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shannon,M.
Human posh-like protein 1
Patent: EP 1239051-A 1937 11-SEP-2002;
Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human posh-like protein 1
Patent: EP 1239051-A 1936 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp DN Sequence 1936 from Patent EP1239051.
AX532427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX532428
Sequence 1937 from Patent EP1239051.
AX532428
                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                            /organism="Homo sapiens"
                                                                                                                                                                                     Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX532427.1 GI:25256629
                                                                                                                                                                                                                                                                                                                                                                                                                                             777 GAGGCAGCCCCTCTG 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX532428.1 GI:25256631
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                803 CTCTCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 cccrccrccccrckd 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16 GAGGGGATCCCCTGTG 1
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Aeomica, Inc. (US)
```

```
CCCCAATTCTCAGGGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 CCCCAATTCTCAGGGC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
16 CCACCACGGCTGAGGG 1
                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                              DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 994
AX578523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 995
                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                              JOURNAL
                                                         RESULT 99
AX578522
                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    엄
                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 22-NOV-2002
                                                                                                                ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                       PAT 22-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                        Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; rive 0; Mismatches 3; Indels
                                                                                 ch 3.9%; Score 11.2; DB 1; Length 17; 1 Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amenica, 11ke protein 1
Patent: EP 1239051-A 1946 11-SEP-2002;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                         Human posh-like protein 1
Patent: EP 1239051-A 1945 11-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp Dl
Sequence 1946 from Patent BP1239051.
AX532437
AX532437.1 GI:25256648
 Location/Qualifiers
1. 17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                       AX532436
Sequence 1945 from Patent BP1239051.
AX532436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                     Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                              AX532436.1 GI:25256646
                                                                                                                                         766 CCTCCACTTCTGAGGG 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccaccaceecreaeee 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.99
Best Local Similarity 81.23
Matches 13; Conservative
                                                                                    Query Match
Best Local Similarity
Matches 13; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                             Shannon, M.
                                                                                                                                                                                                                                                                                                                                                                                                                        Aeomica,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 992
AX532437/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                              AX532436/c
LOCUS
                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                               RESULT 991
                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                     g
```

766 CCTCCACTTCTGAGGG 781

à

```
and Grupe, A.
Method and reagent for the inhibition of calcium activated chloride
Method and reagent for the inhibition of calcium activated chloride
channel.1 (Glca-1)
Patent: WO 0211674-A 361 14-FEB-2002;
PATENTY PHARMACEUTICALS, INC. (US); Syntex (U.S.A.) LLC (US);
Thompson, James (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                    Thompson, J., Mcswiggen, J., Mckenzie, T., Ayers, D., Szymkowski, D.E. and Grupe, A. Mcswiggent for the inhibition of calcium activated chloride channel 1 (clca.1) Patent: WO 0211674-A 360 14-FEB-2002; RIBOZYME PRARMACEUTICALS, INC. (US); Syntex (U.S.A.) LLC (US);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 10-JAN-2003
  PAT 10-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Thompson, J., Mcswiggen, J., Mckenzie, T., Ayers, D., Szymkowski, D.E.
                                                                                                                                                                                Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
       RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
17 bp F Sequence 360 from Patent W00211674. AX578522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX578523 17 bp 17 bp 18 AX578523 21 dr.:2764725 AX578523.1 GI:27647725
                                                                                                                                                                                                                                                                                                                                                                                                          Thompson, James (US)
Location/Qualifiers
                                                                                    AX578522.1 GI:27647724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             767 CTCCACTTCTGAGGGC 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      767 CTCCACTICTGAGGGC 782
```

```
AX648389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gu, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  / Mc.
Local Si...
13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gu, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                      source
                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                        RESULT 998
                                                                                                                                                                                                                                                                                                                                                                                                    AX648388/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX648389/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 999
                                                                                                                                        JOURNAL
       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
                                    SOURCE
                                                                                                                                                                                                                                                                                                                  ઠે
                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                        and Grupe, A.
Method and reagent for the inhibition of calcium activated chloride channel-1 (clca-1)
Patent: WO 0211674-A 2042 14-FEB-2002;
RIBOZYME PHARMACEUTICALS, INC. (US); Syntex (U.S.A.) LLC (US);
                   PAT 10-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Woolf,T. Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 22-MAR-2003
                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                            Thompson, J., Mcswiggen, J., Mckenzie, T., Ayers, D., Szymkowski, D.E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Swedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17;
31.2%; Pred. No. 6e+02;
Ive 0; Mismatches 3; Indels
                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent: EP 1260586-A 1632 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
               AX580204 17 bp R1
Sequence 2042 from Patent WO0211674.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX634493
Sequence 1632 from Patent EP1260586.
                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 227 from Patent BP1273660. AX648387
                                                                                                                                                                                                                                                  Thompson, James (US)
Location/Qualifiers
                                                           AX580204.1 GI:27649406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX634493.1 GI:28470107
                                                                                                                                                                                                                                                                                                                                                                                                            779 GGGCAGCCCCTCTGGT 794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      crcecrrcreccace 17
                                                                                                                                                                                                                                                                                                                                                                                                                                 17 GGACAGCTCCTCTAGT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81.2%;
                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Thes 13; Conserve
                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX634493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            897
                                                                                                                                                                                                                                                                               source
AX580204/c
                            DEFINITION
                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX648387/c
                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 997
                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                              REFERENCE
                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX634493
                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 22-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 22-MAR-2003
                                                             Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                        .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ÷
                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                              Gu,Y.
Human sodium-hydrogen exchanger like protein 1
Patent: EP 1273660-A 227 08-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human sodium-hydrogen exchanger like protein 1
Patent: EP 1273660-A 228 08-JAN-2003;
Acomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human sodium-hydrogen exchanger like protein 1
Patent: EP 1273660-A 229 08-JAN-2003;
Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                             1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX648388 17 bp 1
Sequence 228 from Patent EP1273660.
AX648388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ax648389
Sequence 229 from Patent EP1273660.
                                                                                                                                                                                                                     Aeomica, Inc. (US)
Location/Qualifiers
AX648387.1 GI:29151205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX648388.1 GI:29151206
                                                                                                                                                                                                                                                                                                                                                                                                                                                              928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX648389.1 GI:29151207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         943 TTTTACGCAAGAAGAG 958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 rrrcardcaadaagcg 2
                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 Trrcardcaagagg 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 81.24
Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                          943 TTTTACGCAAGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
```

```
Homo sapiens
                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX674091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1004
                                                                                                                           DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1003
                                                                                    RESULT 1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                      ORGANISM
                                                                                                   AX673189/c
                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX674091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ⋩
                                     g
            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 27-MAR-2003
                                                                                                                   ó
                                                                                                                                                                                                                                                   PAT 22-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and their use as
                                                                                                                                                                                                                                                                                                                                              Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·,
                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.2; DB 1; Length 17;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                  Query Match
3.9%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                    Human sodium-hydrogen exchanger like protein 1
Patent: EP 1273660-A 230 08-JAN-2003;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Parent: WO 03004526-A 1400 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1400 from Patent W003004526.
AX672955
AX672955.1 GI:29331303
                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                           AX648390 17 bp I
Sequence 230 from Patent BP1273660.
AX648390
              1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Location/Qualifiers
                                                                                                                                                                                                                                                                                               AX648390.1 GI:29151208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    941 AATTTTACGCAAGAAG 956
                                                                                                                                                 941 AATTTTACGCAAGAAG 956
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.9%;
Best Local Similarity 81.2%;
Matches 13; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 AGTTTCATGCAAGAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                           17 AGTTTCATGCAAGAAG 2
                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       medicines
                                                                                                                                                                                                                                                                                                                                                                                                         Gu, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1001
                  source
                                                                                                                                                                                                                            RESULT 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX672955/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                          AX648390/c
                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
   FEATURES
                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                              q
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 27-MAR-2003
                                                                                                                                                                  PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour
reversion, apoptosis and/or resistance to viruses and their use as
                                                                                                                                                                                                                                                                                                                                                                                                     Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; rive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent: WO 03004526-A 1634 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Parent: WO 03004526-A 2536 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                        17 bp DNA Sequence 1634 from Patent W003004526.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX674091 17 bp DNA Sequence 2536 from Patent WO03004526.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX674091.1 GI:29332439
                                                                                                                                                                                                                                        AX673189.1 GI:29331537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             802 GCTCTCCTCCAACTCA 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   928 CCACCCTCCAGAGAAT 943
897 CTCAGCTTCTGCGATC 912
||||| ||| ||||
16 CTCAGTCTCTGGGATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GATCTCCTCCAAAACA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17 CCACCTCCTGCGGAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
```

```
AX687770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local
                                                                                                                                                                                                                                                                                                                                           RESULT 1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
ORGANISM
   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX687770/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                             REFERENCE
                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                       AX687514
                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                             д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                       Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour eversion, apoptosis and/or resistance to viruses and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and their use as
                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·,
                                                                                                                                                                                                                                                                                                                                     Score 11.2; DB 1; Length 17;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 1; Length 17;
                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                               Patent: WO 03004526-A 2700 16-JAN-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent: WO 03004526-A 2894 16-JAN-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 81.2%; Pred. No. 6e+02; tive 0; Mismatches
            AX674255
Sequence 2700 from Patent WO03004526.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2894 from Patent WO03004526. AX674449
                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX676064 17 bp 3
Sequence 17 from Patent WO02059381.
AX676064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                0;
                                                     AX674255.1 GI:29332603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX676064.1 GI:29333748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX674449.1 GI:29332797
                                                                                                                                                                                                                                                                                                                                                                                               901 GCTTCTGCGATCAGAT 916
                                                                                                                                                                                                                                                                                                                                      3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   976 ATCTGGTGTATGGGTA 991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Arcregrerringing 17
                                                                                                                                                                                                                                                                                                                                                                                                                           GCTTCTGAACTCAGAT 2
                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 3.99
Best Local Similarity 81.27
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                      medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus sp.
                                                                                                                                                                                                                                                                                                                                                               13;
                                                                                                                                                                                                                                                                                                                                                                                                                         17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N
                                                                                                                                                                                                                                                                                                                                      Query Match
         LOCUS
                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1006
                                                                                                 ORGANISM
X674255/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
SOURCE
                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                Matches
                                                   VERSION
KEYWORDS
                                                                                                                                            REFERENCE
                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX674449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX676064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
```

```
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 31-MAR-2003
Mus sp.
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shannon,M., Gu,Y. and Nguyen,C.T.
Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                         familial dysautonomia
                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
cive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                              Slaugenhaupt, S. and Gusella, J.F. Gene for identifying individuals with Patent: WO 02059381-A 17 01-AUG-2002; The General Hospital Corporation (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mdd12
Patent: BP 1281758-A 502 05-FEB-2003;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent: EP 1281758-A 246 05-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX687514 17 bp 1
Sequence 246 from Patent EP1281758.
AX687514
                                                                                                                                                                                                                 /organism="Mus sp."
/mol_type="unassigned DNA"
/db_xref="taxon:10095"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX687770 17 bp 1
Sequence 502 from Patent EP1281758.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX687514.1 GI:29410208
                                                                                                                                                                                                                                                                                                                                                                                            915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX687770.1 GI:29410466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        935 CCAGAGAATTTTACGC 950
                                                                                                                                                                                                                                                                                                                                                                                                                                   1 AGGTTCTGCTTTCAGA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAGAGACTTTTCGGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 81.27
er 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                        900 AGCTTCTGCGATCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Aeomica, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
```

PAT 31-MAR-2003

linear

```
Shannon,M., Gu,Y. and Nguyen,C.T.
Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                               Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ch 3.9%; Score 11.2; DB 1; Length 17; 1. Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ch 3.9%; Score 11.2; DB 1; Length 17; 1 Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent: EP 1281758-A 3055 05-FEB-2003;
Aeomica, Inc. (US)
                                                                                                                                                                                                                                                                                                                                      Patent: EP 1281758-A 1399 05-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS AX690324 17 bp D1
DEFINITION Sequence 3056 from Patent EP1281758.
                                                                                             AX688667 17 bp D1
Sequence 1399 from Patent EP1281758.
AX688667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX690323 17 bp Dl Sequence 3055 from Patent EP1281758.

    .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX690323
AX690323.1 GI:29413178
                                                                                                                                                                   AX688667.1 GI:29411369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         832 TCTTTTCTTCTGAA 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           778 AGGCAGCCCCTCTGG 793
778 AGGCCAGCCCCTCTGG 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 Agcecheccacacres 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 retriricirciscada 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                   Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                       (ns)
                                                                                                                                                                                                                                                                                                                                                         Aeomica, Inc.
                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1013
AX690324/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1012
                                                                               RESULT 1011
AX688667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX690323/c
                                                                                                                                                                                                                      ORGANISM
                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                   ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                    KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rocus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                            q
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6
                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 31-MAR-2003
                                                                                                                                                                                                                                                                         PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·;
                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                     1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                         linear
                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent: EP 1281758-A 1398 05-FEB-2003;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                 Query Match 3.9%; Score 11.2; DB 1
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent: EP 1281758-A 504 05-FEB-2003;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX688666 17 bp Di
Sequence 1398 from Patent EP1281758.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned DNA"
/db_xref="taxon:9606"
 1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                  AX687772 17 bp
Sequence 504 from Patent EP1281758.
AX687772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AXĜ88666
AX688666.1 GI:29411368
                                                                                                                                                                                                                                                                                                                         AX687772.1 GI:29410468
                                                                                                                                                        116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     760 CCTAGGCCTCCACTTC 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTTGGCCTCCAGTGC 1
                                                                                                                                                                                        N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%
Query Match
Best Local Similarity 81.2%
Matches 13; Conservative
                                                                                                                                                        761 CTAGGCCTCCACTTCT
                                                                                                                                                                                    17 CTTGGCCTCAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16
                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1010
                                                                                                                                                                                                                                          RESULT 1009
   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                             AX687772/c
                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX688666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      qq
                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                          à
```

ö

Gaps

; 0

PAT 31-MAR-2003

linear

·-

Gaps

0

PAT 31-MAR-2003

linear

```
mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local (
                                                                                                                                                                                                                                                                                           RESULT 1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1017
AX691888/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                         AX691887/c
LOCUS
                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 31-MAR-2003
                                                            Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                    Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and mdz12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·,
                                                                                                                                                                                                                                                                                    ch 3.9%; Score 11.2; DB 1; Length 17; l Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent: EP 1281758-A 4615 05-FEB-2003;
                                                                                                                                                                 Patent: EP 1281758-A 3056 05-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 bp DN Sequence 4615 from Patent EP1281758. AX691883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX691884 17 bp Dr
Sequence 4616 from Patent EP1281759.
                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shannon, M., Gu, Y. and Nguyen, C.T.
                                                                                                                                                                               Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Inc. (US)
Location/Qualifiers
                  AX690324.1 GI:29413179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX691883.1 GI:29414824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX691884.1 GI:29414825
                                                                                                                                                                                                                                                                                                                                                832 TCTTTTCTTCTGAA 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               716 AGGAGAGTGACTCTGG 731
                                                                                                                                                                                                                                                                                                                                                                            rcrrrrcrrcrggada 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 AGGAGAGAGCTGTGG 2
                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Aeomica,
   AX690324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX691884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mdz12
                                                                                                                                                                                                                                                                                                                                                                             16
                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1014
AX691883/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX691884/c
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
ORGANISM
                                                            ORGANISM
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                         a
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 31-MAR-2003
Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shannon, M., Gu, Y. and Nguyen, C.T.
Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
mdz12
                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                         Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.2; DB 1; Length 17; Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 4619 from Patent EP1281758.

AX691887
                                        Patent: EP 1281758-A 4616 05-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent: EP 1281758-A 4619 05-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent: EP 1281758-A 4620 05-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 4620 from Patent EP1281758. AX691888.1 GI:29414829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                           /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                   /organism="Homo sapiens"
                                                         Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX691887.1 GI:29414828
                                                                                                                                                                                                                                                                                                                           731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               712 TCCCAGGAGAGTGACT 727
                                                                                                                                                                                                                                                                                                                                                                 16 AGGAGAGAGGCTGTGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rccraccacacaccr 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                    716 AGGAGAGTGACTCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                   mdz12
```

```
medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S:
Matches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1022
                                                                                                                                                                                                                                                                                              source
              AX722607/c
LOCUS
                                         DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX723177/c
                                                                                                                       ORGANISM
                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX722833
LOCUS
                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                               q
                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                 ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 31-MAR-2003
                                                                                                                                                                       PAT 31-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata; Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shannon, M., Gu, Y. and Nguyen, C.T. Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
                                                                                                                                                                                                                                                                                                                    Shannon,M., Gu,Y. and Nguyen,C.T.
Four human zinc-finger-containing proteins : mdz3, mdz4, mdz7 and
mdz12
                                                                                                                                                                                                                                                                               Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                   Gaps
                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Eutele
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
3.9%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                     Parent: EP 1281758-A 5957 05-FEB-2003;
Aeomica, Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent: EP 1281758-A 5958 05-FEB-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX693226 17 bp Di Sequence 5958 from Patent EP1281758.
                                                                                                                                                                      AX693225
Sequence 5957 from Patent EP1281758.
AX693225
                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Inc. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX693226.1 GI:29416190
                                                                                                                                                                                                                    AX693225.1 GI:29416189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     712 TCCCAGGACAGTGACT 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             712 TCCCAGGAGAGTGACT 727
                                                                 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 TCACAGGAGAGGATT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rcacaddadaddarr 17
                                                                                           16 rccrágadagager 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                 Homo sapiens (human)
Homo sapiens
                                                                 712 TCCCAGGAGAGTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Aeomica,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
                                                                                                                                           RESULT 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                    KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX693226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                          AX693225
                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                 à
                                                                                              d
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 08-MAY-2003
    PAT 08-MAY-2003
                                                                                                                                                                Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ch 3.9%; Score 11.2; DB 1; Length 17; I Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent: WO 03025176-A 520 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                          Patent: WO 03025176-A 294 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX723177 17 bp DN
Seguence 864 from Patent WO03025176.
AX723177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX722833 17 bp DN
Sequence 520 from Patent WO03025176.
AX722833
Sequence 294 from Patent W003025176. AX722607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (house mouse)
Mus musculus
                                                                                                                 Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX723177.1 GI:30423678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX722833.1 GI:30423334
                                                                           AX722607.1 GI:30423108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        921 ATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       897 CTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 Arcaccarcaactrcc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16 crcaecrcccararc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
VERSION
```

```
medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
                                                                                                                                                                             Query Match
                                                                                                                                                                                           Best Local
Matches 1
                                                                                                 source
                                                                                                                                                                                                                                                                                                                     RESULT 1025
AX723853/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX724290
                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                       qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                       Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                     .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                  3.9%; Score 11.2; DB 1; Length 17; larity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                     Patent: WO 03025176-A 864 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent: WO 03025176-A 879 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX723550
Sequence 1237 from Patent WO03025176.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman, A., Amson, R. and Tuijnder, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX723192 17 bp Di
Sequence 879 from Patent WO03025176.
                                                                                                                                                                                                                   /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
           Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX723192.1 GI:30423693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX723550.1 GI:30424051
                                                                                                                                                                                                                                                                                                                                                 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              887 GCACTTACTTCAGC 902
                                                                                                                                                                                                                                                                                                                                                                               GradadricaAgaric 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                744 GIAGGGICCCAGGGIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus
                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       medicines
                                                                                                                                                                                                                                                                                 Query Match
Best Local Simi
Matches 13;
                                                                                                                                                                                                                                                                                                                                                                             16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                        Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                AX723192/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX723550/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                          REFERENCE
                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
KEYWORDS
                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia; Eutheria, Rodentia, Sciurognathi; Muridae, Murinae, Mus.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                        ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·,
                                                                                                                                                                                                                                                                                ch 3.9%; Score 11.2; DB 1; Length 17; l Similarity 81.2%; Pred. No. 6e+02; l3; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                     Patent: WO 03025176-A 1237 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 medicines
Patent: WO 03025176-A 1540 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX724290 17 bp DNA Sequence 1977 from Patent WO03025176.
AX724290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: WO 03025176-A 1977 27-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX723853 17 bp DNA Sequence 1540 from Patent WO03025176.
                                                                                                                                                                          /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Molecular Engines Laboratories (FR)
Location/Qualifiers
1...17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX723853
AX723853.1 GI:30503196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX724290.1 GI:30503633
                                                                                                                                                                                                                                                                                                                                                                                   807 CCTCCAACTCAGGGTT 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901 GCTTCTGCGATCAGAT 916
                                                                                                                                                                                                                                                                                                                                                                                                                                17 cercadacredadar 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 81.23
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGCTGTGCTCAGAT
```

Mon Jul 12 11:21:14 2004

```
medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX726019/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1031
                                                                                          RESULT 1029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                   DEFINITION
                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                       AX724743
LOCUS
                                                                                                                                                                                KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                      g
              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                          ô
                                                                                                                                                                                                                               PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                        Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                     Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ouery Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                           Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                linear
                                                                                          Indels
                                                          3.9%; Score 11.2; DB 1;
llarity 81.2%; Pred. No. 6e+02;
Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Patent: WO 03025176-A 2349 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               medicines
Patent: WO 03025176-A 2377 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 2377 from Patent W003025176.
                                                                                                                                                                                                                               AX724662 17 bp DNA Sequence 2349 from Patent W003025176.
AX724662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
/organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
                                                                                                                                                                                                                                                                              AX724662.1 GI:30504005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX724690.1 GI:30504033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        921 ATCACCACCACCTCC 936
                                                                                                                         921 ATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCACCAACTCCTTCC 17
                                                                                                                                                    2 Arcrecacerecerae 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 81.2<sup>3</sup>
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                             Mus musculus
                                                                          Local Similarity
nes 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                        medicines
                                                               Query Match
                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1028
AX724690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                   RESULT 1027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                    AX724662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                         ð
```

```
PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
                                                                                                                                                           PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
                                                                                                                                                                                                                                                                                                                Mus musculus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 1; Length 17; larity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent: WO 03025176-A 2430 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Medicari, WO 03025176-A 3706 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                            AX724743 17 bp DNA
Sequence 2430 from Patent W003025176.
AX724743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX726019 17 bp DNA Sequence 3706 from Patent WO03025176. AX726019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                         Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX726019.1 GI:30505362
                                                                                                                                                                                                                                      AX724743.1 GI:30504086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         967 ACTCTCTAAATCTGGT 982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              956 GAGCCAAATTGACTCT 971
884 GATGCACTTACTTCTC 899
                                              1 GATCCACCTGCTTCTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GATCCACATGGACTCT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 AATCTCTATATCTGAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            medicines
```

```
13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                            medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  medicines
                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                          RESULT 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1035
AX727077
       ORGANISM
                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
TITLE
                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                           AX726735
                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                   PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 08-MAY-2003
                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                            Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                           .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                           Score 11.2; DB 1; Length 17;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                  Molecular Engines Laboratories (FR)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent: WO 03025176-A 3917 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
               AX726116 17 bp DNA Sequence 3803 from Patent WO03025176.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX726230 17 bp DNA Sequence 3917 from Patent WO03025176.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 bp DNA
WO03025176.
                                                                                                                                                                                                                                                                                 /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Mus musculus"
                                                                                     Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX726565
Sequence 4252 from Patent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                     0,
                                                           AX726116.1 GI:30505459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX726230.1 GI:30505573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX726565.1 GI:30505908
                                                                                                                                                                                                                                                                                                                                                                                                  909 GATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                         3.9%;
81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        897 CTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                            GATCAGCTTGTCTTCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     crerectrereare 1
                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13; Conservative
                                                                                                        Mus musculus
                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                          medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX726230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX726565
                                                                                                                                                                                                                                                                                                                                                                       13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16
                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1033
                             DEFINITION
                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX726230/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                          ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
AX726116
LOCUS
                                                                                                                                                REFERENCE
                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX726565
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                            Db
```

```
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 08-MAY-2003
Mus musculus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                             Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·.
                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 11.2; DB 1; Length 17; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Indels
                                                                                                                                                                                             Patent: WO 03025176-A 4252 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent: WO 03025176-A 4422 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4422 from Patent W003025176. AX726735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 4764 from Patent W003025176. AX727077
                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                       organism="Mus musculus"
                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX726735.1 GI:30506078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX727077.1 GI:30506420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    884 GAIGCACTIACTICIC 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                851 AGCGTCCTGGCTCCAG 866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GATCCACTTATCTCTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%;
81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Arcerceredered 17
```

o;

a ð

```
PAT 08-MAY-2003
                                                                                                                                                                                                                                PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                              tumour
use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                         Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, reversion, apoptosis and/or virus resistance and their
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
iive 0; Mismatches 3; Indels
                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                  linear
                                 3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DNA
                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent: WO 03025175-A 799 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                             medicines
Patent: WO 03025175-A 765 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 799 from Patent WO03025175. AX729165. GI:30508508
                                                                                                                                                                                                                                  AX729131 17 bp DN
Sequence 765 from Patent WO03025175.
AX729131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

    1.17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                      Mismatches
/db_xref="taxon:10090"
                                                                    0;
                                                                                                                                                                                                                                                                                        AX729131.1 GI:30508474
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                775 CIGAGGCAGCCCCIC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       918 ATCATCACCACCC 933
                                                                                                         901 GCTTCTGCGATCAGAT 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 GCTTCTCCAATAAGAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 81.2
Matches 13; Conservative
                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13; Conservative
                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                    Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16
                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
                                                                                                                                                                                                 RESULT 1038
AX729131/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                       ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX729165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                               PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·.
                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                          Score 11.2; DB 1; Length 17;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                               linear
   medicines
Patent: WO 03025176-A 4764 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                medicines
Patent: WO 03025176-A 5179 27-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    medicines
Patent: WO 03025176-A 5188 27-WAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX727501 17 bp DNA
Sequence 5188 from Patent W003025176.
AX727501 GI:30506844
                                                                                                                                                                                                                                                                                                                                                             AX727492 179 from Patent W003025176. 
Sequence 5179 from Patent W003025176. 
AX727492 GI:30506835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Mus musculus"
/mol_type="unassigned DNA"
                                                                                         /organism="Mus musculus"
/mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="unassigned DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus musculus (house mouse)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  918 ATCATCACCACCACC 933
                                                                                                                                                                                                                                        921 ATCACCACCACCTCC 936
                                                                                                                                                                 3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Arcarcacccagccc 17
                                                                                                                                                                                                                                                                       2 Arccccaccacc 17
                                                                                                                                                      Query Match
Best Local Similarity 81.29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1037
                                                                              source
                                                                                                                                                                                                                                                                                                                               RESULT 1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX727501/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                AX727492
                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
```

ò 셤

ö

0

Mon Jul 12 11:21:14 2004

```
Query Match
Best Local Similarity
                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                              medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1043
AX730420
                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1044
                                                                 SOURCE
ORGANISM
      DEFINITION
                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX730546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                               PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                  Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                  Patent: WO 03025175-A 1762 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent: WO 03025175-A 1810 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.9%; Score 11.2; DB 1
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX730176 17 bp DNA Sequence 1810 from Patent WO03025175.
                                                                                             AX730128
Sequence 1762 from Patent WO03025175.
                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                           AX730128
AX730128.1 GI:30509471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX730176.1 GI:30509519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          976 ATCTGGTGTATGGGTA 991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    956 GAGCCAAATTGACTCT 971
2 ATCATCACAAAAACCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 Arcredrerrrrrrr 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GATCAAAACTGACTCT 16
                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                     medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX730176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX730176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1042
AX730185
LOCUS
                                                                                                                                                                                                                                                                                                                                                                  SOUTH
                                                                RESULT 1040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                      ORGANISM
                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX730176
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                          KEYWORDS
                                                                           AX730128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                         VERSION
                                                                                           LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

PAT 08-MAY-2003

linear

DNA

17 bp

AX730185

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 08-MAY-2003
                                                                                                                                           Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                           Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                   Metent: WO 03025175-A 1819 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2054 from Patent W003025175.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patent: WO 03025175-A 2054 27-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX730546 17 bp DNA
Sequence 2180 from Patent W003025175.
AX730546
Sequence 1819 from Patent W003025175.
AX730185
AX730185.1 GI:30509528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                   1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX730420.1 GI:30509763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX730546.1 GI:30509889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               953 GAAGAGCCAAATTGAC 968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           909 GATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 GATCAGCAAAATTGAC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GATCAGATTTTGAACA 16
                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
```

```
medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX733345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1048
AX733345/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                   RESULT 1047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                   AX732805
LOCUS
                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                qq
                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                      Gaps
                             Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 17;
                                                                                                                                                                                                                                Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent: WO 03025175-A 2514 27-WAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3138 from Patent W003025175. AX731504
                                                                                                 Parent: WO 03025175-A 2180 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent: WO 03025175-A 3138 27-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                       AX730880 17 bp DNA Sequence 2514 from Patent W003025175. AX730880 GI:30510223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.9%; Score 11.2; DB Best Local Similarity 81.2%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX731504.1 GI:30510847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          921 ATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                      884 GATGCACTTACTTCTC 899
                                                                                                                                                                                                                                                                                                                           1 GALCCACTICTITCTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 ATCACCCCCCCCCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                       medicines
                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1045
AX730880
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX731504/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                      JOURNAL
                    REFERENCE
                                      AUTHORS
                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                       쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                         à
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 08-MAY-2003
                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                        Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                   Query Match 3.9%; Score 11.2; DB 1;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent: WO 03025175-A 4979 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent: WO 03025175-A 4439 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 bp DNA
W003025175.
                                                                                                                                                                                                                                                                                                                                                                                                                                    AX732805 17 bp DNA Sequence 4439 from Patent WO03025175. AX732805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                        /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db xref="taxon:9606"
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 4979 from Patent AX733345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX733345.1 GI:30512688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX732805.1 GI:30512148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       800 GAGCTCTCCTCCAACT 815
                                                                                                                                                                                                                                                                     928 CCACCCTCCAGAGAAT 943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATCTGTCCTCTAACT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                  17 ccacccrccrcccar 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              medicines
```

```
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                medicines
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                         RESULT 1051
                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX734902/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
                                                                                      DEFINITION
                                                                                                                                                                   ORGANISM
                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1053
                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                        AX734054
LOCUS
                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX734152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                       .
0
                                                                                                                                                                                 PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                       Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                      Gaps
                                                                                                                                                                                                                                                                                                                                    Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
   3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; artive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17; 11.2%; Pred. No. 6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                 linear
                                    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                               Patent: WO 03025175-A 5607 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 5629 from Patent W003025175. AX733995.1 GI:30513338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patent: WO 03025175-A 5629 27-MAR-2003;
                                                                                                                                                                            AX733973
Sequence 5607 from Patent WO03025175.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                          AX733973.1 GI:30513316
                                                              790 CTGGTGCCAAGAGCTC 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909 GATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         909 GATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATCTGATTAATATCA 16
                                                                                              16 cregreceadaderc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ilarity 81.2%;
Conservative
                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Query Match 3.99
Best Local Similarity 81.23
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13, Conservative
                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                       medicines
                                                                                                                                                                                                           AX733973
                                                                                                                                            RESULT 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1050
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                        AX733973
LOCUS
                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX733995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

1 GATCAGAATTTCACCA 16

```
PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 08-MAY-2003
                                                                                                                                        Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                             Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour reversion, apoptosis and/or virus resistance and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or virus resistance and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
Sequence 5688 from Patent W003025175. AX734054
                                                                                                                                                                                                                                                                                                                 Parent: WO 03025175-A 5688 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent: WO 03025175-A 5786 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX734152
Sequence 5786 from Patent W003025175.
AX734152
AX734152.1 GI:30513495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX734902 17 bp DN
Seguence 492 from Patent WO03025177.
AX734902
                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
                                                                        AX734054.1 GI:30513397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              909 GATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  914 GATTATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GATCAACCTCACCACC 16
                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
```

AUTHORS TITLE

REFERENCE

JOURNAL

FEATURES

```
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 3025177-A 1950 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A. 1430 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A 1254 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                              Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                            Query Match 3.9%; Score 11.2; DB 1; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1950 from Patent W003025177. AX736360
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1430 from Patent W003025177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                             1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX736360.1 GI:30515637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX735840.1 GI:30515117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     921 ATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                            897 CTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17
                                                                                                                                                                                                                                                                                                                                                                 16 crcagcrcaaccarc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCACCCCCCCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1056
                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX736360
LOCUS
              AUTHORS
                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX735840
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 3022117-A 1241 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                   Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments 2.7-MAR-2003; Molecular Engines Laboratories (FR)

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                   ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                            DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX735651 17 bp DNA Sequence 1241 from Patent W003025177. AX735651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp DNA WO03025177.
                                                                                                                                                                                                                                                                                                                                                                                            Score 11.2; DB :
Pred. No. 6e+02;

    .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX735664
Sequence 1254 from Patent
AX735664
                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX735664.1 GI:30514941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX735651.1 GI:30514928
                    AX734902.1 GI:30514179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                897 CTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              871 AACACTTTCCTGAGAT 886
                                                                                                                                                                                                                                                                                                                                                                                              3.9%;
81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 crradcrrcrradard 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 AACACTAGCTTGAGAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                         Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 81.2
Les 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S:
Matches 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1055
                    VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX735664/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX735651/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
```

ACCESSION VERSION KEYWORDS

g

ð

SOURCE

REFERENCE AUTHORS TITLE

JOURNAL

FEATURES

ACCESSION

ð

VERSION

KEYWORDS

REFERENCE

PAT 08-MAY-2003

ô

Gaps

·.

·.

Gaps

; 0

PAT 08-MAY-2003

```
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                             RESULT 1060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX738269
                                                                                                                            AX737941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                        VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                         SOURCE
                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                              Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       임
                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                    PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                           Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                       Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A 2709 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 0302517-A 3173 27-WAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                               Gaps
                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
0
                                                                           3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 1; Length 17;
                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                   AX737119 17 bp DNA Sequence 2709 from Patent W003025177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 bp DNA WO03025177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.2; DB:
81.2%; Pred. No. 6e+02;
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3173 from Patent AX737583
                                                                                                                                                                                                                                                                                               AX737119.1 GI:30516407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX737583.1 GI:30516871
                                                                                                                                         909 GATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              851 AGCGTCCTGGCTCCAG 866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 ATCATCCTGGTTCCAG 17
                                                                                                                                                                    1 GATCACAATAACATCA 16
                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                          Conservative
1. .17
                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                    Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                  AX737119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX737583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
 source
                                                                                                                                                                                                                    RESULT 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                 AX737119
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX737583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                                                                         ð
                                                                                                                                                            셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

```
ö
                                                                                                                                                                                                             PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 0302517-A 3531 27-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Telerman, A., Amson, R. and Tuijnder, M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A 3859 27-MAR-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
    Indels
  3;
                                                                                                                                                                                                 Sequence 3531 from Patent W003025177. AX737941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX738269 17 bp DNA
Sequence 3859 from Patent WO03025177.
AX738269
                                                                                                                                                                                                                                                                                                                                                                                                                                           Telerman, A., Amson, R. and Tuijnder, M.
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
.;
0
                                                                                                                                                                                                                                                                              AX737941.1 GI:30517229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX738269.1 GI:30517557
                                             909 GATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 918 ATCATCACCACCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           909 GATCAGATTATCATCA 924
                                                                                    1 GATCAAATATCTTCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2 Archaerececeacee 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||||| ||||| |||| || || 1
1 GATCACATTATTATAA 16
                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 81.2%
13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                               Homo sapiens
```

```
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1066
AX739754
                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                               REFERENCE
                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                      AX739661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 08-MAY-2003
                                 PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                          Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptocis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A 3875 27-WAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments Patent: WO 03025177-A 3955 27-MAR-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .,
                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17; 31.2%; Pred. No. 6e+02; ver 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX738365
Sequence 3955 from Patent W003025177.
AX738365
AX738365.1 GI:30517653
                              AX738285 17 bp DNA Sequence 3875 from Patent WO03025177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3992 from Patent WO03025177. AX738402 AX738402 GI:30517690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                              AX738285.1 GI:30517573
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     921 ATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                      858 TGGCTCCAGTTGGAAC 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 Arcaccccrccccc 17
                                                                                                                                                                                                                                                                                                                                                                                                    1 Similarity 81.2%;
13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 rescascastresarc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
Homo sapiens
                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13; Conservative
                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                    AX738285
                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
     RESULT 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX738402/c
                                                  DEFINITION
                                                                                                                                ORGANISM
                    AX738285/c
                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                              AUTHORS
TITLE
                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                             JOURNAL
                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX738365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                 Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 03025177-A 3992 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in phenomena of tumour suppression, tumour reversion, apoptociss and/or resistance to viruses and the use thereof as medicaments
Patent: WO 3022177-A 5251 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in phenomena of tumour suppression, tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
3.9%; Score 11.2; DB 1;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX739661 17 bp DNA Sequence 5251 from Patent W003025177. AX739661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 bp DNA WO03025177.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX739754
Sequence 5344 from Patent
AX739754
AX739754.1 GI:30519051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX739661.1 GI:30518958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                914 GATTATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            963 ATTGACTCTCTAAATC 978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GATCAACCTCACCACC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 Arrgaarcreragarc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
```

g à

ò

```
PAT 23-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 23-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                            .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                               linear
                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                          3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
Live 0; Mismatches 3;
     81.2%; Pred. No. 6e+02;
iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                            Shannon, M. and Phan, T.
Human angiomotin-like protein 1
Patent: WO 03037931-A 243 08-MAY-2003,
Amersham Biosciences SV Corp. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human angiomotin-like protein 1
Patent: WO 03037931-A 246 08-MAY-2003;
Amersham Biosciences SV Corp. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                         AX753896 17 bp Di Sequence 243 from Patent WO03037931.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 246 from Patent W003037931.

AX753899.1 GI:32166596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 bp
                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                           AX753896.1 GI:32166593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       775 CTGAGGGCAGCCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shannon, M. and Phan, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    777 GAGGCAGCCCCTCTG 792
                                                                                        1 GACTTGGAAGGATGCC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 CTGAGGGGAGGCCCAC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GAGGGGAGGCCCACTG 16
                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                        738 GACTIGGIAGGGICCC
                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                Homo sapiens
 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                             AX753896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX757868
                      13;
                                                                                                                                         RESULT 1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1071
AX757868/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1070
                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
KEYWORDS
                     Matches
                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                             AX753896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX753899
                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCUS
                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                            PAT 14-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 14-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
reversion, apoptosis and/or resistance to viruses and the use thereof as medicaments
Patent: WO 30325177-A 5344 27-MAR-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
0
                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.2; DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhang,J.
A human G protein coupled receptor
Patent: WO 03031621-A 955 17-APR-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A human G protein coupled receptor
Patent: WO 03031621-A 956 17-APR-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                     AX744990 17 bp Di
Sequence 955 from Patent WO03031621.
AX744990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX744991 17 bp DN Sequence 956 from Patent WO03031621. AX744991.1 GI:30723658
                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .17
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mol_type="genomic_DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                        AX744990.1 GI:30723657
                                                                                                                                                                                                                                    914 GATTATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   738 GACTIGGTAGGGTCCC 753
                                                                                                                                                                                                                                                                       1 GATCAACCTCACCACC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 GACTTGGAAGGATGCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                    Conservative
                                                                                                                                                                Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Zhang, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                   source
                                                                                                                                                                                                                                                                                                                       RESULT 1067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
KEYWORDS
                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                        AX744990
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX744991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
```

ò

0

ô

```
Patent: WO 03040369-A 2723 15-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            medicines
                                                                               medicines
                                                                                                                                                                                                                                                                                                              16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX759402/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                           RESULT 1074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                           AX758679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                          Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                              Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
iive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: WO 03040369-A 1779 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                      Parent: WO 03040369-A 1189 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 bp DNA WO03040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 bp DN Sequence 1779 from Patent WO03040369. AX758458
Sequence 1189 from Patent WO03040369.
AX757868
                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1824 from Patent
AX758503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX758503.1 GI:32253119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX758458.1 GI:32253074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           800 GAGCTCTCCTCCAACT 815
                                   AX757868.1 GI:32252484
                                                                                                                                                                                                                                                                                                                                                                                             905 CTGCGATCAGATTATC 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                            cresecreasarcare 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                  Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 GATCTCTCTTGCAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX758503
                                                                                                                                                                                                                                                                                                                                                                                                                            16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1072
                                                                                                                                                                                                                                                            Source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX758503/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
        DEFINITION
ACCESSION
                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                               REFERENCE
                                                                                                                                               AUTHORS
                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX758458
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                     KEYWORDS
                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                            TITLE
                                      VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                             q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dd
                                                                                                                                                                                                                                                                                                                                                                                                  à
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 27-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman,A., Amson,R. and Tuijnder,M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                               Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                   Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                   Patent: WO 03040369-A 1824 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX759402 17 bp DNA Sequence 2723 from Patent WO03040369. AX759402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX758679 17 bp DNA
Sequence 2000 from Patent WO03040369.
AX758679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX759402.1 GI:32254018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX758679.1 GI:32253295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   800 GAGCTCTCCTCCAACT 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                               897 CTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATCTGTCCTCTAACT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            crcadcrcaaccarc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 81.4.
Best Local 3, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            medicines
```

```
AX760278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S:
Matches 13
                                                                                                                                                       RESULT 1078
AX759857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX760278/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                SOURCE
                                                                     ò
                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                            PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                        .,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .,
                                                                                                              Query Match
3.9%; Score 11.2; DB 1; Length 17;
Best Local Similarity 81.2%; Pred. No. 6e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Patent: WO 03040369-A 2990 15-WAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent: WO 03040369-A 3177 15-MAY-2003
                                                                                                                                                                                                                                                                                                         AX/59669 17 bp DN Sequence 2990 from Patent W003040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3177 from Patent W003040369. AX759856
                                              /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Molecular Engines Laboratories (FR)
Location/Qualifiers
                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                         AX759669.1 GI:32254285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX759856.1 GI:32254472
                                                                                                                                                                                   871 AACACTTTCCTGAGAT 886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     921 ATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCACTACAACCATCC 17
                                                                                                                                                                                                                   17 AACACTAGCTTGAGAT 2
                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    medicines
                                                                                                                                                                                                                                                                                                       AX759669
                                                                                                                                                                                                                                                                                                                                          AX759669
                                source
                                                                                                                                                                                                                                                                       RESULT 1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1077
AX759856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sonrce
                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                         AX759669
                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
```

```
ô
                                                                                                                                                                                                                                                        linear PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                 Sequence 3178 from Patent W003040369. AX759857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent: WO 03040369-A 3178 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: WO 03040369-A 3599 15-MAY-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX760278 17 bp DNA Sequence 3599 from Patent WO03040369.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. 17
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .17
/organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                  AX759857.1 GI:32254473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX760278.1 GI:32254894
                                                                                         909 GATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          976 ATCTGGTGTATGGGTA 991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              928 CCACCTCCAGAGAT 943
                                                                                                                                     1 GATCACATTATTATA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 Arcredrerrrrerra 17
                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 ccacccrccrccccar 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similaricy
hes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            medicines
```

```
AX761495.1 GI:32256111
                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1084
AX774028/c
LOCUS
                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1083
AX762946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                           ORGANISM
                                                                                                       AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                        REFERENCE
                                                                                                                                                                  JOURNAL
 VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dp
                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 25-JUN-2003
                                                              PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral resistance phenomena and their use as medicines
                                                                                                                                                                                                              Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral suppression appoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 1; Length 17; llarity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                           Score 11.2; DB 1; Length 17;
Pred. No. 6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                              linear
                                                                                                                                                                                                                                                                      Parent: WO 03040369-A 4467 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4771 from Patent W003040369. AX761450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AX761495 17 bp DNA Sequence 4816 from Patent WO03040369. AX761495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patent: WO 03040369-A 4771 15-MAY-2003;
                                                        Sequence 4467 from Patent W003040369. AX761146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX761450.1 GI:32256066
                                                                                                          AX761146.1 GI:32255762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     775 CTGAGGGCAGCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                        971 TCTAAATCTGGTGTAT 986
                                                                                                                                                                                                                                                                                                                                                                                               3.9%;
81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 creasecascastic 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17 rerearcererear 2
                                                                                                                                    Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                          13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX761450/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX761495/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                          DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                               REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                AX761146/c
                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                           VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ob
                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
```

```
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 09-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 25-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                    Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telerman, A., Amson, R. and Tuijnder, M. Sequences involved in tumoral suppression, tumoral reversion, apoptosis and/or viral resistance phenomena and their use as medicines
                                                                                                            Telerman,A., Amson,R. and Tuijnder,M.
Sequences involved in tumoral suppression, tumoral reversion,
apoptosis and/or viral resistance phenomena and their use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Katinger, H., Kunert, R., Mueller, D. and Unterluggauer, F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                ch 3.9%; Score 11.2; DB 1;
1 Similarity 81.2%; Pred. No. 6e+02;
13; Conservative 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patent: WO 03040369-A 6267 15-MAY-2003;
Molecular Engines Laboratories (FR)
Location/Qualifiers
                                                                                                                                                                                          medicines
Patent: WO 03040369-A 4816 15-MAY-2003;
Molecular Engines Laboratories (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX762946 17 bp DNA Sequence 6267 from Patent WO03040369. AX762946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 bp I
Sequence 13 from Patent WO03046162.
AX774028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                      /organism="Homo sapiens"
                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX762946.1 GI:32257562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX774028.1 GI:32485854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            914 GATTATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     967 ACTCTCTAAATCTGGT 982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GATCAACCTCACCACC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 Acreacabarerear 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
Homo sapiens
Homo sapiens (human)
```

ó

```
17 CATCACCATCTTCCAG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                        Guo, J.
                                                                                                                                                                                RESULT 1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1088
                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                               AX783339/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX786028/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                   8
                                                                                                                               ρp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                 PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 17-JUL-2003
                                                GmbH (AT); Katinger,
Dethardt (AT);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleogtomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
 Process for the production of polypeptides in mammalian cell
                                                                                                                                                                                                                                         ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·.
                                                                                                                                                                                                     Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                  linear
                           Patent: WO 03046162-A 13 05-JUN-2003;
Polymun Scientific Immunbiologische Forschung Hermann (AT); Kunert, Renate (AT); Mueller, Unterluggauer, Florian (AT)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Guo,J.

Human prostate cancer candidate protein 1
Patent: WO 03050284-A 605 19-JUN-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human prostate cancer candidate protein 1
Patent: WO 03050284-A 606 19-JUN-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                        1...17
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
/note="Epo 204 back primer"
                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                            AX782274 17 bp DN
Seguence 605 from Patent W003050284.
AX782274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 606 from Patent W003050284. AX782275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                           AX782274.1 GI:32950123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AX782275.1 GI:32950124
                                                                                                                                                                                                                                                                   974 AAATCTGGTGTATGGG 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         803 CTCTCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                          17 AACTTTGGTGTCTGGG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        crcrcarcerrered 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Guo, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17
                                                                                                             source
                                                                                                                                                                                                                                                                                                                                              RESULT 1085
AX782274/c
                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX782275/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

```
linear PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note="Amorce PCR antisens pour l'amplification specifique du gene de GAPDH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                           ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                       Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 6e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Denormandie, P., Sapena, R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human prostate cancer candidate protein 1
Patent: WO 03050284-A 1670 19-JUN-2003;
Amersham Biosciences (SV) Corp. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .17
/organism="synthetic construct"
                                                                                                                                                                                                                                                                                    Sequence 1670 from Patent W003050284. AX783339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bandelier, M.A., Denys, P., Denormandie, Lepailleur-Enouf, D. and Youssefian, T. Bone development model
Patent: WO 03050272-A 24 19-JUN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX786028 17 bp 1
Sequence 24 from Patent WO03050272.
AX786028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                           AX783339.1 GI:32951188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX786028.1 GI:32953648
                                                                                                                                 803 CTCTCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       902 CTICTGCGATCAGATT 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          923 CACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        artificial sequences.
                                                                                                                                                                             16 crcrcarcarcacia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 criciécaarcedagi 2
                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           synthetic construct synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sympathos (FR)
                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
```

ó

·,

rge.res

```
13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1092
BD102096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                        RESULT 1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                       BD073209/c
                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
à
                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lop RNA linear PAT 27-AUG-2002 Enzymatic nucleic acid treatment of diseases or conditions related to levels of epidermal growth factor receptors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·,
                                                                                                                                                                                                                                                                                                                                                         ö
                                            PAT 08-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Akhtar,S., Fell,P. and Mcswiggen,J.A.

Akhtar,S., Fell,P. and Mcswiggen,J.A.

Enzymatic nucleic acid treatment of diseases or conditions related to levels of epidermal growth factor receptors

Patent: JP 2001511003-A 271 07-AUG-2001,

RIBOZYME PHARMACEUTICALS INC,ASTON UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Topology: Linear;
Enzymatic nucleic acid treatment of diseases or conditions related to
levels of epidermal growth factor receptors
Key

Location/Qualifiers
                                                                                                                                                                           Zeng,S., Bogner,F.M., Kunert,R., Mueller,D. and Unterluggauer,F. Cell culture process
Patent: WO 03045995-A 19 05-JUN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ם
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08/985162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·.
                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 11.2; DB 1; Length 17; Pred. No. 6e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
iive 0; Mismatches 3; Indels
                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-JAN-1998 JP 1998532913
31-JAN-1997 US 60/036476,04-DEC-1997 US
FR AKHTAR, PATRICIA FELL, JAMES A MCSWIGGEN PC
)/00,C07K14/71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ce 1. .17 __ /organism='Unidentified' Location/Qualifiers
                                                                                                                                                                                                                                                                  /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                              DNA
                                        17 bp
Sequence 19 from Patent WO03045995.
AX799933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                         BIOCHEMIE Gesellschaft m.b.H. (AT)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Strandedness: Single;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unidentified
JP 2001511003-A/271
07-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD067431
BD067431.1 GI:22613034
JP 2001511003-A/271.
                                                                                         AX799933.1 GI:37605421
                                                                                                                                                                                                                                                                                                                                                                                         974 AAATCTGGTGTATGGG 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%;
81.2%;
                                                                                                                                    synthetic construct artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                   17 AACTTTGGTGTCTGGG 2
                                                                                                                      synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.99
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                          13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unidentified
                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SAGHIR
C12N9/0
CC St
CC TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OS
PP
PF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1090
                  RESULT 1089
                              AX799933/c
LOCUS
                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD067431/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                            DEFINITION
                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                             JOURNAL
                                                                                         VERSION
KEYWORDS
SOURCE
                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
Nucleic acid primer of eosinophilic bacterium and method of identifying eosinophilic bacterium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct
synthetic construct
synthetic construct
artificial sequences.
I (bases I to 17)
I artaichi, A., Okamoto, T., Watanabe, Y. and Hanya, I.
I arkaichi, A., Okamoto, T., Watanabe, Y. and Hanya, I.
I arkaichi, A., Okamoto, T., Watanabe, Y. and Hanya, I.
I arkaichi, A., Okamoto, T., Watanabe, Y. and Hanya, I.
I arkaichi, A., Okamoto, T., Watanabe, Y. and Hanya, I.
I arkaichi, A. I. 20-SB-2001;
Orsuka Pharmaceurical Co LTD, AKIHISA TAKAICHI, TOSHIHIKO OKAMOTO, YOSHIMRI WATANABE, IZUMI HANYA
OS Artificial Sequence
Phy WO 0168914-A/II
PD 20-SEP-2001
                                                                                                                     אטט – 17 bp DNA linear PAT 27-AUG-2002
Nucleic acid sequence and method for selectively expressing protein
in taryet cell and tissue.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LLZNIS/09,AGIX48/00,AGIP35/00,AGIP43/00,CI2N5/10,CI2N7/00//AGIX35/76,PC C12N15/00,CI2N5/00 CC Description of Artificial Sequence: Oligonucleotide specific CC CC Lossiphion of Artificial Sequence: Oligonucleotide specific CC CC Description of Artificial Sequence: Oligonucleotide specific CC CC Thr(ACA) FH Key Location/Qualifiers FT source 1.17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 6e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .17
/organism="synthetic construct"
/mol_type="genomic DNA"
/do_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD102096.1 GI:22647670
WO 0168914-A/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                836 ITCTICTCTGAAGACA 851
747 GGGTCCCAGGGTCCCT 762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTCTTCTCAAGACA 1
                                       (V)
                                         17 GGGATCCAGAGTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
```

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13;
    DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1095
                                                                          ORGANISM
                                                                                                                                           TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                    REFERENCE
                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD105131
                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kit and method for determining HLA type
Patent: WO 0192572-A 604 06-DEC-2001;
NISSHINBO INDUSTRIES INC, SYSTEM RESEARCH INC, HIDETOSHI INOKO, TAEKO
KAGIYA, TATSUO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA, MICHIO
NISHIDA
                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
              14-MAR-2000 JP 00P 70284
AKIHISA TAKAICHI, TOSHIHIKO OKAMOTO, YOSHINARI WATANABE, IZUMI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ы
                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inoko,H., Kagiya,T., Ichihara,T., Matsumura,Y., Moriya,S. and
Nishida,M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Artificial Sequence
W0 019572-A/604
06-DEC-2001
01-JUN-2001 W0 2001JP004662
01-JUN-2000 JP 00P 164798
HIDBTOSHI INOKO,TAEKO KAGIYA,TATSUO ICHIHARA,YOSHIYUKI
                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·,
                                                                                                           /organism='Artificial Sequence'. Location/Qualifiers
                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JMUKA,
SEHOGO MORIXA,MICHIO NISHIDA
C1201/68,C12ML/00,C12N15/09,G01N33/53
Description of Artificial Sequence:capture
Key
                                                                                                                                                                                                            DB 1;
                                      HANYA
C12Q1/68,C12N15/00
primer for A. acidoterrestris
Location/Qualifiers
                                                                                                                                     1. 17
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                          Kit and method for determining HLA type. BD104500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .17
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                          Score 11.2; DB 1
Pred. No. 6e+02;
0; Mismatches
23-FEB-2001 WO 2001JP001332
14-MAR-2000 JP 00P 70284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
                                                                                                                                                                                            3.9%; Scor.
81.2%; Pred
0; !
                                                                                                                                                                                                                                                                                                                                                                                                    BD104500.1 GI:22650074
                                                                                                                                                                                                                                                                 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       826 TGTGTCTTTTTTTT 841
                                                                                                                                                                                                                                                                                        2 radgearcracriere 17
                                                                                                                                                                                                                                                                                                                                                                                                                               synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 17)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  readrercarricary 17
                                                                                                                                                                                                                                                              762 TAGGCCTCCACTTCTG
                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%
Query Match
Best Local Similarity 81.2%
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                 WO 0192572-A/604.
                                                                                                                                                                                                                      Best_Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OS Artifi
PN WO 019
PN WO 019
PP 01-JUN
PR 11-JUN
PI HIDETO
MATSUMURA,
PI SHOGO 1
PC C12Q1/
CC Descri
FH KEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD104502
 PR
PI
PI
PI
FI
FI
                                                                                                                                                                                                         Query Match
                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1094
BD104502
LOCUS
                                                                                                                                                                                                                                                                                                                                RESULT 1093
BD104500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
```

PAT 27-AUG-2002

linear

DNA

ďq

```
Kit and method for determining HLA type
Patent: WO 0192572-A 606 06-DEC-2001;
NISSHINBO INDUSTRIES INC, SYSTEM RESEARCH INC, HIDETOSHI INOKO, TAEKO
KAGIYA, TATSUO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA, MICHIO
NISHIDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ``
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kit and method for determining HLA type
Patent: WO 0192572-A 1235 06-DEC-2001;
NISSHINBO INDUSTRIES INC, SYSTEM RESEARCH INC, HIDETOSHI INOKO, TA
KAGIYA, TATSUO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA, MICHIO
NISHIDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PI
                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.

( bases 1 to 17)
Inoko,H., Kagiya,T., Ichihara,T., Matsumura,Y., Moriya,S. and Nishida,M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD105131.1 GI:22650705
WO 0192572-A/1235.
Synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 17)
Inokon. Kagiya,T., Ichihara,T., Matsumura,Y., Moriya,S. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO 0192572-A/606
06-DEC-2001
01-JUN-2001 WO 2001JP004662
01-JUN-2000 JP 00P 164798
HIDETOSHI INOKO, TAEKO KAGIYA, TATSUO ICHIHARA, YOSHIYUKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Artificial Sequence
W0 0192572-A/1235
06-DEC-2001
01-JUN-2001 W0 2001JP004662
01-JUN-2000 JP 00P 164798
HDETOSHI INOKO, TAEKO KAGIYA, TATSUO ICHIHARA, YOSHIYUKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.2; DB 1; Length 17; larity 81.2%; Pred. No. 6e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    O'STATE O'S CONTRACTOR O'S CONTRACTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SHOGO MORIYA,MICHIO NISHIDA
C12Q1/68,C12M1/00,C12N15/09,G01N33/53
Description of Artificial Sequence:capture
Fort Location/Qualifiers
source
and method for determining HLA type.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD105131 17 bp DNA Kit and method for determining HLA type. BD105131

    1.17
    Organism="synthetic construct"
/mol type="genomic DNA"
    /db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                          BD104502.1 GI:22650076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             826 IGTGICTCTTTCTTC 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 readrercarricaric 17
                                                                                                                WO 0192572-A/606.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OS
PN
PD
PF
PR
PI
MATSU
PC
CC
CC
```

```
Similarity
                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                            A61P29/00
                                                                                                                                                                                                                  C12N5/00
                                                                                                                                                                                                                                                                                                                                                                                                             13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PG
PG
                                                                                                                                                                                                                              CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Н
                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                   JOURNAL
                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BD198993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                          TITLE
                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.

BD197630
JP 2002509721-A/656.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                 0
                                                                                                                                                                                                                                 PAT 18-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi;
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C12N15/09, A61K39/09, A61P31/04, C07K14/315, C07K19/00, C12N1/21, C12N5/10,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Strandedness: Single;
Topology: Linear;
Heat shock protein of Streptococcus of Hsp60 family FH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                   ·
0
   'organism='Artificial Sequence'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 1; Length 17;
                                                                                          3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 6e+02;
                                                                                                                                                                                                                                      Heat shock protein of Streptococcus of Hsp60 family.
BD139909
                                                                                                                                                                                                                                                                                                                                                             Heat shock protein of Streptococcus of Hsp60 family Patent: JP 2002508156-A 32 19-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                   Indels
                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'organism='Unidentified'
                                                                                                                   3;
                              1..17
/organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; D
31.2%; Pred. No. 6e+0
tve 0; Mismatches
                                                                                                                    0; Mismatches

    .17
    /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                             JP-MAR-2002
19-MAR-2002
29-DEC-1999 UP 200527654
31-DEC-1997 US 09/001737
IEE MIZZEN, JAN WISNIEWSKI
                                                                                                                                                                                                                                   17 bp
                                                                                                                                                                                                                                                                                                                                                                                       STRESSGEN BIOTECHNOLOGIES CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 17)
Mizzen, L. and Wisniewski, J.
                                                                                                                                                                                                                                                                      BD139909.1 GI:23234854
JP 2002508156-A/32.
unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C12N15/00, C12N5/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       969 TCTCTAAATCTGGTGT 984
                                                                                                                                             930 ACCCTCCAGAGAATTT 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rcacraaagargerer 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81.2%;
                                                                                                                                                                     1 Accercacacadarer 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                            Query Match
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                  Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                          unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                     BD139909
                                                                                                                                                                                                                                                                                                                                                                                                      FI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               N
      FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1097
                                                                                                                                                                                                                        BD139909
LOCUS
DEFINITION
                                 source
                                                                                                                                                                                                             RESULT 1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD197630
                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                     g
                                                                                                                                                δ
```

```
A61P35/00, A61P43/00, C12N5/10, C12N9/00//A61K35/76, C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD198993 17 bp RNA linear PAT 17-JUL-2003 Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response. BD198993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-MAR-1999 JP 2000541291
27-MAR-1998 US 60/079678
PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,
1 (bases 1 to 17)
Pavco, P. A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J. A.
Method and reagent for treating diseases or conditions concerning
molecule participating in vasculogenic response
Patent: JP 2002509721-A 656 02-APR-2002;
RIBOZYME PHARMACETTCALS INC
PN JP 2002509721-A/656
PD 02-APR-2062
PP 2002509721-A/656
PD 02-APR-1999 UP 2000541291
PR 27-MAR-1999 US 60/079678
PR 27-MAR-1999 US 60/079678
PR 27-MAR-1999 US 60/079678
PR 27-MAR-1999 US 60/079678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                              \mathbb{F}^{\mathbb{C}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates; Catarrhini, Hominidae, Homo.

1 (Dases 1 to 1).

1 (Dases 1 to 1).

Pavco, P. A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J. A. Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response pattert: JP 2002509721-A 2019 02-APR-2002; PRIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                       ___C12N15/09,A61K31/7088,A61K31/7125,A61K48/00,A61P3/10,A61P17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Method and reagent for treating diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Method and reagent for treating diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17;
larity 81.2%; Pred. No. 6e+02;
Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     participating in vasculogenic response
Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      participating in vasculogenic response
Key Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              concerning molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            concerning molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
JP 2002509721-A/2019
02-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD198993.1 GI:33008763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JAMES A MCSWIGGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        936 CAGAGAATTTTACGCA 951
                                                                                                                                                                                                                                                                                                                                                                                      JAMES A MCSWIGGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAGAATTTCAGGAA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JP 2002509721-A/2019.
Homo sapiens (human)
Homo sapiens
```

source

FEATURES

Matches

à g 1099

RESULT 10 BD201235

DEFINITION

LOCUS

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

COMMENT

VERSION KEYWORDS SOURCE ACCESSION

```
M BD201555.1 GI:33011325
BD201555.1 GI:33011325
Homo sapiens (human)
SM Homo sapiens (human)
SM Homo sapiens (bordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

E 1 (bases 1 to 17)
S Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A. Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response
L Patent: JP 2002509721-A 491 02-APR-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa, Chordata, Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

E. (bases 1 to 17)
S. Roberts E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A.
Method and reagent for treating diseases or conditions concerning
molecule participating in vasculogenic response
L. Patent: JP 2002509721-A 5728 02-APR-2002;
RIBOZYME PHARMACEUTICALS INC
OS Homo sapiens (human)
PN JP 2002509721-A/5728
PP 24-MAR-1999 JP 200541291
PP 24-MAR-1999 US 60/079678
                                                                                                                                                                                                                                                                                     Homo sapiens (human)
17 200209721-A/4581
02-APR-2002
24-MAR-1999 JP 2000541291
27-MAR-1999 JP 2000541291
PAMEL A PAUCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, JAMES A MCSWIGGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A61P29/00,
PC A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DUZUZ/UZ 17-UUL 17-UUL-2003 Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-APR-2002
24-MAR-1999 JP 2000541291
27-MAR-1998 US 60/079678
PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PI PAMELA A PAVCO, ELISABETH ROBERTS, THALLS UARVIS, CLALLS, CLALLS, CLALLS, CLALLS, CLALLS, CLALLS, CLALLS, CLALLS, CLALLS, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.2; DB 1; Length 17; B1.2%; Pred. No. 6e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .17
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BD202702.1 GI:33012472
JP 2002509721-A/5728.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            942 ATTITACGCAAGAAGA 957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 ATTTTCCGGAAAAGA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C12N5/00
                                                                                                                                                                                                                                                                                       PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          감감됐당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
        ACCESSION
VERSION
KEYWORDS
                                                                                                                                                         REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
TITLE
                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD202702
                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                     COMMENT
                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                q
                                                                                                                                                                                                                       ..
0
                                                                                                                                                                                                                                                                                                                                                                                                               PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OS Homo sapiens (human)
PN JP 2002509721-A/4261
PN JP 2002509721-A/4261
PF 24-MAR-1999 JP 2000541291
PR 27-MAR-1999 US 60/079678
PR JP-MAR-1999 US 60/079678
PI PAMELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT, PI JAMES A MCSWIGGEN
PC JAMES A MCSWIGGEN
PC CLAIS/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                         Method and reagent for treating diseases or conditions concerning molecule participating in Vasculogenic response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria, Primates; Catarrhini, Hominidae; Homo.

1 (barco, P. A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J. A. Method and reagent for treating diseases or conditions concerning Patent: JP 2002509721-A 4261 02-APR-2002;

RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD201555 17 bp RNA linear PAT 17-JUL-200 Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AG1P29/00,
PC A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Method and reagent for treating diseases or conditions
                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·
0
                   /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'organism='Homo sapiens (human)'
                                                                                                                                                                      Score 11.2; DB 1; Length 17;
Pred. No. 6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 17;
                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               concerning molecule
participating in vasculogenic response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1
31.2%; Pred. No. 6e+02;
ive 0; Mismatches
                                                                                                                                                                                                              0; Mismatches
                                                                               /organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="genomic_RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
    1. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD201235.1 GI:33011005
JP 2002509721-A/4261.
Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                                                                      721 AGTGACTCTGGTCATA 736
                                                                                                                                                                 3.9%;
                                                                                                                                                                                                                                                                                           2 Aggarcricidaccria 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   815 TCAGGGTTGGCTGTGT 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rcreciriocerrici 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81.2%;
                                                                                                                                                                                                            13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
    source
                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13;
FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     감물품
                                                                                                                                                                    Query Match
```

source

FEATURES

RESULT 1100

Matches

BD201555/c

LOCUS DEFINITION

·.

Gaps

0;

Mon Jul 12 11:21:14 2004

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modulation.

M BD250597

BD250597

BD250597

BD250597

BD250597.1 GI:33060367

BD250597.1 GI:33060367

BD250597.1 GI:33060367

BD250597.1 GI:33060367

SWithetic construct
artificial sequences.

B Cowsert, L.M., Baker, B.F., Moneil, J., Freier, S.M., Sasmor, H.M., Brooks, D.G., Ohasi, C., Myatt, J.R., Borchers, A.H. and Vikkars, T.A. Identification of generic targets for modulation by oligonucleotides and generation of oligonucleotides for gene modulation

Datent: JP 2002511276-A 151 16-APR-2002;

ISIS PHARMACEUTICALS INC

S Artificial Sequence

SN Artificial Sequence

SN Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TIMOTHY A VIKKARS
C12N15/09, C07B61/00, C07B61/00, C12Q1/68, G06F17/30, G06F17/50, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ы
A61P29/00,
PC A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                         ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PF 13-APR-1999 US 60/081483,28-APR-1998 US 09/067638 PI

LEX M COWSERT, BRENDA F BAKER, JOHN MCNEIL, SUSAN M FREIER, HENRI PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DOUGLAS G BROOKS, CARA OHASI, JACQUELINE R WYATT, ALEXANDER H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD250597 linear PAT 17-JI Identification of genetic targets for modulation by oligonucleotides and generation of oligonucleotides for gene
                                     Cl2N5/00
Method and reagent for treating diseases or conditions concerning molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.2; DB 1; Length 18; 81.2%; Pred. No. 6.3e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism='Artificial Sequence' Location/Qualifiers
                                                                                                                                                                                                                                                                                ch 3.9%; Score 11.2; DB 1; Length 17; 1 Similarity 81.2%; Pred. No. 6e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                             participating in vasculogenic response
Key Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1..18
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
1..18
                                                                                                                                                                                          1. .17
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antisense Oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          727
                                                                                                                                                                                                                                                                                                                                                               705 CAGCGAGTCCCAGGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                   1 casestricccassas 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          712 TCCCAGGAGAGTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BORCHERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               M SASMOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FFE
                                                           ည
                                                                                                 E E E E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1102
                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD250597/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                     à
```

16 rcacaddaaacrer 1

8 A

```
Shir.A. and Levitzky.A. Selective killing of cells by activation of double-stranded rna dependent protein kinase-pkr Patent: WO 0157205-A 18 09-AUG-2001; Hebrew University of Jerusalem (IL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 24-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ó
                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 31-AUG-2001
                     PAT 25-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                       Tobsers 1 to 18)

Roberts, M.L. and Cowsert, L.M.
Antisense modulation of human Rho family gene expression Patent: US 6410323-A 147 25-UUN-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 19;
                                                                                                                                                                                                                                                                  ch 3.9%; Score 11.2; DB 1; Length 18; 1 Similarity 81.2%; Pred. No. 6.3e+02; 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Indels
                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 6.6e+02;
ive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .19
/organism="synthetic construct"
/mol_type="unassigned DNA"
1. .19
1. .19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                         DNA
                18 bp Di
Sequence 147 from patent US 6410323.
AR215599
AR215599.1 GI:23313855
                                                                                                                                                                                                                                                                                                                                                                                                                                 AX207609 19 bp. Sequence 18 from Patent WO0157205. AX207609 AX207609.1 GI:15422315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AX004061 21 bp
Sequence 6 from Patent WO9923222.
AX004061
                                                                                                                                                                                                                   1. .18
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 747 GGGTCCCAGGGTCCCT 762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX004061.1 GI:9927695
                                                                                                                                                                                                                                                                                                                                712 TCCCAGGAGAGTGACT 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 gegeccaageaccer 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                           rcacaggaaggrer 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                 Unknown.
                                                                                                                 Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            primer_bind
                                                                                                                                                                                                                                                                                                                                                              16
                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
RESULT 1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                          AX207609/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                          Best Loca
Matches
             AR215599/c
                                       DEFINITION
                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                           REFERENCE
                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX004061
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                     FEATURES
                           LOCUS
```

```
Local Similarity 100.
les 11; Conservative
                                                                          11 CTCTCCTCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C12N5/00
                                                                                                                                                                                                                                                                                             Katz, E.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Inoue, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
                                                                                                                      RESULT 1108
                                                                                                                                                                                            VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1109
AR167712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
                    Matches
                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                      BD124425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                 PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 21-FEB-2003
             Osbourn, J. K. Cysteine noose antibody libraries, means for their production and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                          (GB)
                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                    Patent: WO 9923222-A 6 14-MAY-1999;
CAMBRIDGE ANTIBODY TECH (GB); OSBOURN JANE KATHARINE
Location/Qualifiers
                                                                                                                                                                                          Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.8%; Score 11; DB 1; Length 11; 100.0%; Pred. No. 4e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                    Query Match 3.9%; Score 11.2; DB 1; Length 2 Best Local Similarity 65.0%; Pred. No. 7.2e+02; Matches 13; Conservative 2; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.8%; Score 11; DB 1; Length 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Petersohn, D., Conradt, M. and Hofmann, K.
Method for determining homeostasis of the skin
Patent: WO 02053/714-A 5082 11-JUL-2002;
Henkel Kommanditgesellschaft auf Aktien (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Compositions and methods for wound healing
Patent: US 6538173-A 256 25-MAR-2003;
Location/Qualifiers
                                                                                                                /organism="synthetic construct"
|mol_type="unassigned DNA"
|db_xref="taxon:32630"
|nofe="primer"
                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AX628041
Sequence 5082 from Patent WO02053774.
                                                                                                                                                                                                                                                                                                                                           Sequence 256 from patent US 6538173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                            747 GGGTCCCAGGGTCCCTAGGC 766
                                                                                                                                                                                                                                                              2 GGGGCCARGGRACCCTGGTC 21
                                                                                                                                                                                                                                                                                                                                                                                       AR301675.1 GI:31689477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX628041.1 GI:28456079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 11)
Heber-Katz, E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.8
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721 AGTGACTCTGG 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unclassified.
                                            nses thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX628041
                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                     source
                                                                                                                                                                                                                                                                                                                  RESULT 1106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1107
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX628041/c
                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                 AR301675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        KEYWORDS
                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 18-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cl2N15/09, A01K67/027, Cl2N5/10, Cl2Q1/68, G01N33/50, Cl2N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 17-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 11)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Method of amplifying DNA fragment, apparatus for amplifying DNA fragment, method of assaying microorganisms, method of analyzing microorganisms and method of assaying contaminant Patent: US 6287769-A 75 11-SEP-2001; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60/097937 PR
                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                             .,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ce 1. .11
/organism='Mus musculus (mouse)'.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Compositions and method for healing wound Patent: JP 2002503460-A 256 05-FEB-2002;
THE MISTITUTE SO THE INSTITUTE OS THE MISTITUTE OS THE MIST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.8%; Score 11; DB 1; Length 11; 100.0%; Pred. No. 4e+02; tive 0; Mismatches 0; Indels
                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Compositions and method for healing wound Key
                                                                        .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD124425 11 bp DNA Compositions and method for healing wound. BD124425
                      Pred. No. 4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
Sequence 76 from patent US 6287769. ARI67712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .12
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .11
/organism="Mus musculus"
/mol_type="genomic DNA"
/db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BD124425.1 GI:23219370
JP 2002503460-A/256.
Mus musculus (house mouse)
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR167712.1 GI:17903510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclassified.
1 (bases 1 to 12)
                                                                                                                                                 803 CTCTCCTCCAA 813
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            l Similarity 100.
11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721 AGTGACTCTGG 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AGTGACTCTGG 11
```

```
C12N15/09, C12M1/00, C12Q1/68, C12N15/00
Strandedness: Single;
                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E64128.1 GI:13019532
JP 1999341989-A/76.
synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 12)
                                                                                                 Topology: Linear;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11; Conservative
                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      848 GACAGCGICCI 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                   848 GACAGCGTCCT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KOICHI INOUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GACAGCGTCCT 11
                    KOICHI INOUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GACAGCGTCCT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 11; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            E64128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OS DE PROPERTOR 
RESCEPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1113
BD061494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Incode, K.

Method and device for amplifying DNA fragment
Patent: JP 200270867-A 76 03-OCT-2000;
SANYO ELECTRIC CO LTD, SOCIETY FOR TECHNO-INNOVATION OF AGRICULTURE
FORESTRY AND FISHERIES
OS Unidentified
PD 03-OCT-2000
PP 19-MAR-1999 JP 1999076844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Method for amplifying DNA fragment, method for estimating state of microorganism existing and method for estimating state of waste patent: JP 199276176-A 76 12-OCT-1999; SANYO ELECTRIC CO LID, SOCIETY FOR TECHNO-INNOVATION OF AGRICULTURE FORESTRY AND FISHERIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 31-JAN-2002
                                                       .
0
                                                                                                                                                                                                                                                                                PAT 18-JUN-2001
                                                                                                                                                                                                                                                                                   12 bp DNA linear PAT 18-JUN-2001
Method for amplifying DNA fragment, method for estimating state of
microorganism existing and method for estimating state of waste.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.8%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 4.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
Query Match
Best Local Similarity 100.0%; Pred. No. 4.4e+02;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Method and device for amplifying DNA fragment. E38702.
E38702.1 GI:18621364
JP 2000270867-A/76.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /organism='Unidentified'
Location/Qualifiers

    .12
    /organism="unidentified"
    /mol_type="genomic DNA"
    /db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                          E29596
E29596.1 GI:13021099
JP 1999276176-A/76.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unidentified
unclassified.
1 (bases 1 to 12)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unclassified.
1 (bases 1 to 12)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                           848 GACAGCGTCCT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          848 GACAGCGTCCT 858
                                                                                                                                                          1 GACAGCGTCCT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Koichi, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1111
E38702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                         RESULT 1110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rocus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
                                                                                                                                                          g
                                                                                                                ŏ
```

```
Method for amplifying DNA fragment, amplification apparatus of DNA fragment, method for assaying a group of microorganisms, method for analyzing a group of microorganisms, and method for assaying contaminating substance patent: JP 199341989-A 76 14-DEC-1999;
SANYO ELECTRIC CO LTD, SOCIETY FOR TECHNO-INNOVATION OF AGRICULTURE FORESTRY AND FISHERIES
OS ARTIFICIAL Sequence
PN JP 1999341989-A/76
PN JP 1999341989-A/76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                               DA4128
Method for amplifying DNA fragment, amplification apparatus of DNA fragment, method for assaying a group of microorganisms, method for analyzing a group of microorganisms, method for analyzing a group of microorganisms, and method for assaying contaminating substance.
                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ce 1..12 /organism='Artificial Sequence'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.8%; Score 11; DB 1; Length 12;
100.0%; Pred. No. 4.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                3.8%; Score 11; DB 1; Length 12;
100.0%; Pred. No. 4.4e+02;
ive 0; Mismatches 0; Indels
/organism='Unidentified'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C12N15/09, C12M1/00, C12Q1/68, C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers

    .12
    Organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Pred. No. 4.4 tive 0; Mismatches
                                                              1. .12
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-MAR-1999 JP 1999069694
```

```
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JAMES A MCSWIGGEN
                                                                                                                                                                                                                                               848 GACAGCGTCCT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 898 TCAGCTTCTGC 908
                                                                                                                                                                                                                                                                               1 GACAGCGTCCT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCAGCTTCTGC 13
           Key
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C12N5/00
         표보답
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                   source
                                                                                                                                                                                                                                                                                                                                    RESULT 1115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1116
A07232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                        LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                         BD197865
                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                             엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                               Inoue, K.

Method for discriminating microorganisms, apparatus for discriminating microorganisms, method for preparing data base for discriminating microorganisms, and recording medium recorded with program for discriminating microorganisms.

Patent: JP 2001275700-A 21 09-0CT-2001;

SANYO ELECTRIC CO LTD, SOCIETY FOR TECHNO-INNOVATION OF AGRICULTURE FORESTRY AND FISHERIES

SANYO ELECTRIC SQUENCE

NO JP 2001275700-A/21

PD 09-0CT-2001

PP 31-MAR-2000 JP 2000099482
       PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Method of discriminating microorganisms, apparatus for discriminating microorganisms, method of making database for discriminating microorganisms, microorganisms discriminating program and record medium for recording the same Patent: WO 0175156-A 21 11-0CT-2001;

SANYO ELECTRIC CO LID, SOCIETY FOR TECHNO INNOVATION OF AGRICULTURE FORESTRY AND FISHBRIBS, TAKARAZU INOUE

N ATHIFICIAL Sequence

N MO 0175156-A/21

PD 11-0CT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-MAR-2001 WO 2001JP002516
31-MAR-2000 JP 00P 099482
TAKAKAZU INOUE
C12Q1/68,C12N15/10,G01N33/48,G01N27/447,G06F17/30,C12M1/00 CC
             Method for discriminating microorganisms, apparatus for discriminating microorganisms, method for preparing data base for discriminating microorganisms, and recording medium recorded with program for discriminating microorganisms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         C12Q1/68, C12M1/00, C12M1/34, C12N15/09, G06F17/30, C12N15/00 CC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD101941 12 bp DNA linear PAT 27-AU Method of discriminating microorganisms, apparatus for discriminating microorganisms, method of making database for discriminating microorganisms, microorganisms discriminating program and record medium for recording the same.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.8%; Score 11; DB 1; Length 12; 100.0%; Pred. No. 4.4e+02; ative 0; Mismatches 0; Indels
     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                 31-MAR-2000 JP 2000099482
KOICHI INOUE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                      BD061494
BD061494.1 GI:22607100
JP 2001275700-A/21.
Synthetic construct
synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BD101941.1 GI:22647515
                                                                                                                                                                               artificial sequences.
1 (bases 1 to 12)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.8
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 12)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            848 GACAGCGTCCT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GACAGCGTCCT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO 0175156-A/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                    PI KC
PC C1
Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Inoue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1114
LOCUS
DEFINITION
                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
TITLE
                                                                                                       VERSION
KEYWORDS
                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD101941
                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 17-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
JP 2002509721-A/891
02-APR-2002
24-MAR-1999 JP 2000541291
27-MAR-1999 US 60/079678
PAWELA A PAVCO, ELISABETH ROBERTS, THALE JARVIS, CLAIRE COESHOTT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A61P35/00,A61P43/00,C12N5/10,C12N9/00//A61K35/76,C12N15/00, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response.

BD197865.

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 25-AUG-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo.

1 (Dases 1 to 1)

Pavco, P.A., Roberts, E., Jarvis, T., Coeshott, C. and Mcswiggen, J.A. Method and reagent for treating diseases or conditions concerning molecule participating in vasculogenic response
Patent: JP 2002509721-A 891 02-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C12N15/09, A61K31/7088, A61K31/7125, A61K48/00, A61P3/10, A61P17/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Method and reagent for treating diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A07232 15 bp DNA linear PAT 25. Oligonucleotide homologous to the alpha-1 antitrypsin gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
l. .12
/organism='Artificial Sequence'.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism='Homo sapiens (human)'. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.8%; Score 11; DB 1; Length 12; Best Local Similarity 100.0%; Pred. No. 4.4e+02; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.8%; Score 11; DB 1; Length 14; 100.0%; Pred. No. 5.3e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        concerning molecule
participating in vasculogenic response

    1.2
    ^.12
    ^.0rganism="synthetic construct"
    ^.mol type="genomic DNA"
    ^.db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .14
/organism="Homo sapiens"
/mol_type="genomic RNA"
/db_xref="taxon:9606"
                                                                                                      Location/Qualifiers
```

ó

Gaps

. 0

PAT 29-SEP-1999

```
Unclassified.
Unclassified.
1 (bases 1 to 15)
1 Dapper,K.G.
Draper,K.G.
Patent: US 5869253-A 428 09-FEB-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
Unclassified.
1 (bases 1 to 15)
Draper, K.G.
Method and reagent for inhibiting hepatitis C virus replication Patent: US 6132966-A 428 17-0CT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 3.8%; Score 11; DB 1; Length 15; Best Local Similarity 100.0%; Pred. No. 5.7e+02; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                              Query Match 3.8%; Score 11; DB 1; Length 15; Best Local Similarity 100.0%; Pred. No. 5.7e+02; Matches 11; Conservative 0; Mismatches 0; Indels
                                                Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
3.8%; Score 11; DB 1; L
Best Local Similarity 100.0%; Pred. No. 5.7e+02;
Matches 11; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 bp Dr
Sequence 428 from patent US 5610054.
IS7891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15 bp Di
Sequence 428 from patent US 6132966.
AR113484.1 GI:14093806
                                                                                                                                                                                                                     15 bp D1
Sequence 428 from patent US 5869253.
AR033662
                                                                                                                                                                                                                                                                                                                                                                                                                          1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .15
/organism="unknown"
/mol_type="unassigned DNA"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                   AR033662.1 GI:5949267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              713 CCCAGGAGAGT 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               713 CCCAGGAGAGT 723
                                                                                                              763 AGGCCTCCACT 773
                                                                                                                                5 AGGCCTCCACT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 CCCAGGAGAGT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13 CCCAGGAGAGT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1121
I57891/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1120
                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                         RESULT 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR113484/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                         AR033662/c
                                                                                                                                                                                                                                                   ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                         qq
                                                                                                                 ò
                                                   synthetic construct
synthetic construct
artificial sequences.

I (bases 1 to 15)
Garman, A.J. and Moore, R.S.
Detection of nucleic acid sequences using fluorescence polarisation
Patent: BP 0382433-A 15 16-AUG-1990;
IMPERIAL CHEMICAL INDUSTRIES PLC
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 11-DEC-1996
                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                     6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             METHODS FOR PRODUCING MEMBERS OF SPECIFIC BINDING PAIRS Patent: WO 9201047-A 179 23-JAN-1992; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.8%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 5.7e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                      3.8%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 5.7e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               unidentified
unclassified.
1 (bases 1 to 15)
Brysch, W. and Schlingensiepen, K.
AN ANTISENSE OLIGONUCLEOTIDE PREPREATION METHOD
PATENT: WO 9813904-A 1650 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                          A33056 Looduct BamHI insert mutagenic oligo.
ScFv PCR product BamHI insert mutagenic oligo.
A33056 GI:1926688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"

    .15
    forganism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15 bp Di
Sequence 1650 from Patent WO9833904.
A89502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 15)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A89502.1 GI:6738072
                         A07232.1 GI:413004
                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                   917 TATCATCACCA 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    925 CCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                   CCACCACCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  디
                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1118
                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1117
A33056/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
DEFINITION
                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
FEATURES
                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                 JOURNAL
                                                                                                      REFERENCE
           ACCESSION
                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A89502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
```

ö

Gaps

. 0

PAT 16-MAY-2001

PAT 07-0CT-1997

ó

Gaps

0

```
11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            773 TICTGAGGGCA 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               923 CACCACCACC 933
                                                Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 CACCACCACCC 14
                                             15 TTCTGAGGGCA
                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best_Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                reactions
                                                                                                                   AX374614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                      RESULT 1124
AX374614/c
                                                                                                                                                                        KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
VERSION
                                                                                                                   LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1126
                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX572880
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                    ð
                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                          PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 20-APR-2002
                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                           Draper,K.G.
Bnzymatic RNA molecule targeted against Hepatitis C virus
Patent: US 5610054-A 428 11-MAR-1997;
Location/Qualifiers
                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         " ( bases 1 to 15)
Vogelstein, B., Kinzler, K.W., Zhang, L. and Zhou, W.
Gene expression profiles in normal and cancer cells
Patent: US 633152-A 711 25-DEC-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                               3.8%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 5.7e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.8%; Score 11; DB 1; Length 15; Best Local Similarity 100.0%; Pred. No. 5.7e+02; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.8%; Score 11; DB 1; Length 15; Best Local Similarity 100.0%; Pred. No. 5.7e+02; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.

1 (bases 1 to 15)
Stinchcomb, D. T., Draper, K.G. and McSwiggen, J. Stinchcomb, D. T., Draper, K.G. and McSwiggen, J. Ratl a targeted ribozymes
Patent: US 5658780-A 272 19-AUG-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                    161718 15 bp Di Seguence 272 from patent US 5658780.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR180643
Sequence 711 from patent US 6333152.
                                                                                                                                       1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR180643.1 GI:20222676
 I57891.1 GI:2482955
                                                                                                                                                                                                                                                                                                                                                                                             I61718.1 GI:2479666
                                                                    (bases 1 to 15)
                                                                                                                                                                                            Query Match 3.8 Best Local Similarity 100. Matches 11; Conservative
                                                                                                                                                                                                                                                     713 CCCAGGAGAGT 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 897 CTCAGCTTCTG 907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTCAGCTTCTG 11
                                                                                                                                                                                                                                                                            13 CCCAGGAGAGT
                                                       Unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
Unclassified.
                          Unknown.
                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR180643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR180643
                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                 161718
                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                          RESULT 1122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR180643/c
LOCUS
                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                             TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
VERSION
KEYWORDS
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                    REFERENCE
                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                              Db
```

ò

Gaps

.; 0

```
PAT 01-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 29-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 21-FEB-2003
                                                                                                          Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lopez-Calle, E., Fries, J. and Jungmann, J. Methods and means for detecting enzymatic cleavage and linkage
                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
   linear
                                                                                                                                                                                                                                                                                                                                                                              Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                              Choi, J.Y., Koshy, B., Kliem, S. and Stephens, J.C. Haplotypes of the alas2 gene Patent: WO 0210454-A 35 07-FEB-2002; Genaissance Pharmaceuticals, Inc. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.8%; Score 11; DB 1; L
100.0%; Pred. No. 5.7e+02;
iive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                        3.8%; Score 11; DB 1; I
84.6%; Pred. No. 5.7e+02;
tive 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: WO 02059352-A 3 01-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AX636200
Sequence 3339 from Patent EP1260586.
                                                                                                                                                                                                                                                                                                                    /mol_type="unassigned DNA"
/db_xref="taxon:9606"
15 bp
Sequence 35 from Patent W00210454.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 3 from Patent W002059352. AX572880
                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Evotec OAI AG (DE)
Location/Qualifiers
                                  AX374614
AX374614.1 GI:19169511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX572880.1 GI:26004964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.
                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                  791 TGGTGCCAAGAGC 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX636200
LOCUS
DEFINITION
```

```
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD208393.1 GI:33018163
JP 2002512791-A/1983.
unidentified
unidentified
                                                                 BD207395.1 GI:33017165
JP 2002512791-A/985.
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                     related to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          virus)
                                                                                                                                                                                                                                                                                                                                              DENNIS MACEJAK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  713 CCCAGGAGAGT 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13 CCCAGGAGAGT 3
                                                                                                                unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                T 2 2 2 2 3
                                                                                                                                                                                                                                                                                                                                                                                                                                  SELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
              LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD208393/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                    SOURCE
ORGANISM
BD207395/c
                                                                                                                                           REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                        ACCESSION
                                                                                                                                                                                                   JOURNAL
                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·.
                                                                                                                                                                Woolf,T.
Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 27-AUG-2002
                                                                                                    Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Direnzo,A., Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J., Mcswiggen,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M., Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       An antisense oligomucleotide preparation method
Patent: JP 2001511000-A 1650 07-AUG-2001;
BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH (1207H21/04, AGIK31/70 An antisense oligonucleotide preparation method FH Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.8%; Score 11; DB 1; Length 15;
100.0%; Pred. No. 5.7e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                    3.8%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 5.7e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BD067015
An antisense oligonucleotide preparation method. BD067015.1 GI:22612618
UP 0501511000-A/1650.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism='Unknown'.
Location/Qualifiers
                                                                                                                                                                                          genes
Patent: EP 1260586-A 3339 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                              /organism="unidentified"
/mol_type="unassigned RNA"
/db xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unidentified
unclassified.
1 (Dases 1 to 15)
Schlingensiepen, K.H. and Brysch, W.

    .15
    /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-AUG-2001
30-JAN-1998 JP 1998532533
31-JAN-1997 EP 97101531.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown
JP 2001511000-A/1650
                   AX636200.1 GI:28471814
                                                                                                                                                                                                                                                                                                                     Query Match 3.8
Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        763 AGGCCTCCACT 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGCCTCCACT 15
                                                                                                                                                                                                                                                                                                                                                                                                          1 crcagcricig 11
                                                                                                                                                                                                                                                                                                                                                                              897 CTCAGCTTCTG
                                            unidentified
unidentified
unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
       AX636200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1127
BD067015
                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
       ACCESSION
                   VERSION
KEYWORDS
SOURCE
                                                                                         REFERENCE
                                                                                                        AUTHORS
                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
```

à g RESULT 1128

ð qq

```
Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unclassified.

1 (bases I to 15)

Blatt L. Meswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.

Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection

Entert: JP 2002512791-A 1983 08-MAY-2002;

RIBOZYME PHARMACEUTICALS INC

OS HEPATITIS virus (hepatitis C virus)

PN J 2002512791-A/1983

PD 08-MAY-2002

PF 20-APR-1999 US 60/083217,18-SEP-1998 US 60/100842 PR 27-APR-1999 US 09/257608,23-MAR-1999 US 09/274553 PI
BD207395 17-JUL-2003 Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                         1 (bases 1 to 15)
Blatt, L., Mcswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
Braymatic nucleic acid treatment of diseases or conditions related
to hepatitis C virus infection
Patent: JP 2002512791-A 985 08-MAY-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,A61K37/66,
C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             H
                                                                                                                                                                                                                                                                                                                                                                  ENDOZYME PHARMACEUTICALS INC

OS HEDATLIS VICUS (hepatitis C virus)

PN JP 2002512791-A/985

PN JP 2002512791-A/985

PF 26-APR-1999 JP 2000545991

PR 27-APR-1999 US 60/083217,18-SEP-1998 US 60/100842 PR

LAARROCE BLATT JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A PI

PAVCO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Enzymatic nucleic acid treatment of diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism='Hepatitis virus (hepatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.8%; Score 11; DB 1; Length 15; 100.0%; Pred. No. 5.7e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hepatitis C virus infection.
Key Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1. .15
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
```

```
Oligonucleotide (c6).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide (C6)
A10639
A10639.1 GI:490767
                                                                                                                                                       A09436.1 GI:490541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            oligonucleotide 'c6'
A11587
A11587.1 GI:491129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                      713 CCCAGGAGAGT 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 716 AGGAGAGTGAC 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           716 AGGAGAGTGAC 726
                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13 AGGAGAGTGAC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13 AGGAGAGTGAC 3
                                                  15 CCCAGGAGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
les 11; Conserv
                                                                                                                           A09436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A10639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A11587
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                             RESULT 1131
A09436/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1133
A11587/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1132
                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                                                                                                                       TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A10639/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                SOURCE
                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                  ô
                                                                                                                                                                                                                                                                                                                                                                                                                                        LD DD RNA linear PAT 17-JUL-2003 Enzymatic nucleic acid treatment of diseases or conditions related to bepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Blatt, L., Mcwiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D. Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection
Patent: JP 2002512791-A 2523 08-MAY-2002;
STIBOZYME PHARMACEUTICALS INC
OS Hepatitis virus (hepatitis C virus)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                              C12N9/00,A6IK31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
A61K37/66,
C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
A61K37/66,
                                                                                                                                                                    E
                                                                                        Enzymatic nucleic acid treatment of diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Г
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PR 27-APR-1998 US 60/083217,18-SEP-1998 US 60/100842 PR 25-FEB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI LAWRENCE BLAIT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enzymatic nucleic acid treatment of diseases or conditions
                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                'organism='Hepatitis virus (hepatitis C
LAWRENCE BLAIT, JAMES A MCSWIGGEN, ELISABETH ROBERIS, PAMELA A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism='Hepatitis virus (hepatitis C
                                                                                                                                                                                                                                                                                                                 .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                       ; DB 1; Lex., io. 5.7e+02; O; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.8%; Score 11; DB 1; Length 15; Best Local Similarity 100.0%; Pred. No. 5.7e+02; Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                        Hepatitis virus (hepatitis C virus)
JP 2002512791-A/2523
08-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                 3.8%; Score 11; DB 100.0%; Pred. No. 5.7 rative 0; Mismatches
                                                                                                                                                                                                         1. .15
/organism="unidentified"
/mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          related to hepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PF 26-APR-1999 JP 2000545991
PR 27-APR-1998 US 60/08321
25-FEB-1999 US 09/257608,23-
                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD208933.1 GI:33018703
                                                                                                                                                                             virus)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   virus)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JP 2002512791-A/2523.
                            DENNIS MACEJAK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DENNIS MACEJAK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              unidentified
unclassified.
1 (bases 1 to 15)
                                                                                                                                                                                                                                                                                                            11; Conservative
                                                                                                                                                                                                                                                                                                                                         756 GGTCCCTAGGC 766
                                                                                                                                                                                                                                                                                                                                                                      4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             C12N15/00
                                                                                                                                                                                                                                                                                                                                                           GGTCCCTAGGC
                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAVCO,
                                12 22 23
22 23 23
23 23 23
                                                                                                                                                                                                                                                                                                                                                                    14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEEE
                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                           BD208933/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
```

```
PAT 09-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 02-DEC-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 16-NOV-1993
                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic construct
artificial sequences.
1 (bases 1 to 16)
Ucday.I., Niwa,M., Saito,Y., Sato,S., Ono,H. and Kitaguchi,T.
Process for production of gamma-interferon
Patent: EP 0176916-A 24 09-APR-1986;
FUJISAWA PHARMACEUTICAL CO., LTD
                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                          synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 16)
Ueda, I., Niwa, M., Saitoh, Y., Satoh, S. and Yamada, H.
Process for production of somatostatin
Parent: EP 0197558-A 42 15-OCT-1986;
FUJISAWA PHARMACEUTICAL CO., LTD
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.8%; Score 11; DB 1; Length 16; 100.0%; Pred. No. 6.1e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                      3.8%; Score 11; DB 1; Length 16;
100.0%; Pred. No. 6.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                         0; Indels

    .16
    forganism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                            100.0%; Pred. No.
ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 bp
16
                                                                                                                                                                                                                                Location/Qualifiers
```

ö

Gaps

. 0

```
    .16
/organism="synthetic construct"

                                                                                                                                                                                                                                                                                                                                                                                                                                                    /moi_type="unassigned RNA"
/mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                       AR435915.1 GI:40198999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      923 CACCACCACC 933
                                                                                                894 CTICICAGCIT 904
                                                                                                                  16 CTTCTCAGCTT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11 CACCACCACCC 1
                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                            Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1137
                                                                                                                                                                               RESULT 1136
AR435915/c
                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                           VERSION KEYWORDS
                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BD104886
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 17-AUG-2003
                                                                                                                                                                                                                                                                               ô
                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 06-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         synthetic construct
synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 16)
Ueda,I., Niwa,M., Satoh,S., Saitoh,Y. and Kusunoki,C.
Ueda,I., Niwa,M., Satoh,S., Saitoh,Y. and Rusunoki,C.
Ueda,I., Niwa,M., Satoh,S., Saitoh,Y. and Rusunoki,C.
Encess for production of isulin-like growth factor I and plasmid
for production thereof
Patent: BP 0219814-A 57 29-APR-1987;
FUJISAWA PHARMACEUTICAL CO., LTD
Location/Qualifiers
                Synchetic construct
artificial sequences.
I (bases I to 16)
Ucda, I., Niwa, M., Saito, Y., Sato, S., Ono, H. and Kitaguchi, T.
59 Valine insulin-like growth factor I and process for production
thereof
Patent: EP 0158892-A 83 23-OCT-1985;
FUUISAWA PHARMACEUTICAL CO., LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tasses 1 to 16)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endethelial growth factor receptor Patent: US 6566127-A 5974 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ٥.
                                                                                                                                                                                                                                                                               .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.8%; Score 11; DB 1; Length 16; 100.0%; Pred. No. 6.1e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                             Query Match.

3.8%; Score 11; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 11; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1..16
/organism="synthetic construct"
/mol type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                 /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5974 from patent US 6566127.
AR328572
AR328572.1 GI:33714380
                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                             16 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /orqanism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic IGF-I gene oligo.
A35107
A35107.1 GI:1926766
          synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       716 AGGAGAGTGAC 726
                                                                                                                                                                                                                                                                                                               716 AGGAGAGTGAC 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13 AGGAGAGTGAC 3
                                                                                                                                                                                                                                                                                                                                     13 AGGAGAGTGAC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                               A35107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Simi
Matches 11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1135
                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR328572/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                         REFERENCE
                                                                          AUTHORS
                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                 A35107/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dd
```

```
Length 16;
                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                               Unclassified.

(Dases 1 to 16)

Eckstein,F., Ludwig,J. and Beigelman,L.

Nucleic acid catalysts with endonuclease activity
Patent: US 6656731-A 174 02-DEC-2003;
                                               0; Indels
Query Match
3.8%; Score 11; DB 1; Le
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 11; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                    16 bp RN
Sequence 174 from patent US 6656731.
AR435915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .16
/organism="unknown"
```

PAT 18-DEC-2003

Gaps 0 Query Match

3.8%; Score 11; DB 1; Length 16;
Best Local Similarity 100.0%; Pred. No. 6.1e+02;
Matches 11; Conservative 0; Mismatches 0; Indels

ö

PAT 27-AUG-2002 synthetic construct synthetic construct artificial sequences. 1 (bases 1 to 16) Inoko, H., Kagiya, T., Ichihara, T., Matsumura, Y., Moriya, S. and Nishida, M. 16 bp DNA Kit and method for determining HLA type. BD104886 BD104886.1 GI:22650460 WO 0192572-A/990.

Kit and method for determining HLA type Patent: WO 0192572-A 990 06-DEC-2001, NISSHINBO INDUSTRIES INC, SYSTEM RESEARCH INC, HIDETOSHI INOKO, TAEKO KAGSHINBO INDUSTRIES INC, SYSTEM RESEARCH INC, HIDETOSHI INOKO, TAEKO KAGSHINBO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA, MICHIO NISHIDA ΡI Artificial Sequence
W0 0192572-A/990
06-DEC-2001
01-JUN-2001 W0 2001JP0004662
01-JUN-2000 JP 00P 164798
HIDETOSHI INOKO, TAEKO KAGIYA, TATSUO ICHIHARA, YOSHIYUKI organism='Artificial Sequence'

```
AR202457.1
                                                   Unknown.
                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A11054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S:
Matches 14
                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     All054/c
LOCUS
DEFINITION
                                                                                                                                         AUTHORS
TITLE
JOURNAL
FEATURES
                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM
                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
       VERSION
KEYWORDS
                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AX350848
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            셤
                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                    PAT 14-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 08-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 17)
Lin,L.-F.H., Collins,F.D., Doherty,D.H., Lile,J. and Bektesh,S.
Glial cell line-derived neurotrophic factor
Patent: US 6093802-A 18 25-UUL-2000;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unclass: Unc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                    .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                               3.8%; Score 11; DB 1; Length 16;
100.0%; Pred. No. 6.1e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.8%; Score 11; DB 1; Length 17; 100.0%; Pred. No. 6.4e+02; tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.8%; Score 11; DB 1; Length 17;
100.0%; Pred. No. 6.4e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                             Sequence 18 from patent US 6093802.
AR104490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 from patent US 6221376.
ARI47206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR202457
Sequence 18 from patent US 6362319.
AR202457
/mol_type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17 bp
                                                                                                                                                                                                                                                                                                                                                                          AR104490.1 GI:12817198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AR147206.1 GI:15111009
                                                                                 Best Local Similarity 100.
Matches 11; Conservative
                                                                                                                                                     929 CACCCTCCAGA 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     856 CCTGGCTCCAG 866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       856 CCTGGCTCCAG 866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccrddcrccAG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTGGCTCCAG 3
                                                                                                                                                                                               4 CACCCTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 11; Conserv
                                                                                                                                                                                                                                                                                                           AR104490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR147206
                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1140
AR202457/c
LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                 RESULT 1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1139
                                                                                                                                                                                                                                                                                      AR104490/c
                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR147206/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                     ð
                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

```
·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 06-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Taupier, R.J., Vernet, C.A., Fernandes, B., Shimkets, R.A., Majunder, K., Padjaaru, M., Colman, S.D., Zerhusen, B.D., Spytek, K.A., Burgess, C.E. and Liu, X.
Novel human proteins, polynucleotides encoding them and methods of suising the same
Patent: WO 01/9294-A 48 25-0CT-2001;
Curagen Corporation (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 06-DEC-1993
                                                                   Unknown:
Unclassified.
1 (bases 1 to 17)
Lin,L.-F.H., Collins,F.D., Doherty,D.H., Lile,J. and Bektesh,S.
Glial cell line-derived neurotrophic factor
Patent: US 6362319-A 18 26-MAR-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tobases 1 to 14)
Penalva, A.M., Tourino, A., Patino, C., Sanchez, F., Rubio, V. and Fernandez-Sousa, J.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cephalosporium acremonium transformed with an aminoglycoside resistance marker
Patent: EP 0181213-A 4 14-MAY-1986;
                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                         3.8%; Score 11; DB 1; Length 17;
100.0%; Pred. No. 6.4e+02;
cive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.8%; Score 11; DB 1; Length 22; 73.7%; Pred. No. 8e+02; 5; Indels cive 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .22
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                           1. .17
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AX350848 22 bp
Sequence 48 from Patent WO0179294.
AX350848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide adapter B. All054
All054.1 GI:489254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               757 GTCCCTAGGCCTCCACTTC 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GACCCTTGGACCCTACTTC 19
GI:20256996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX350848.1 GI:18616308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="Primer"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 synthetic construct
synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                   11; Conservative
                                                                                                                                                                                                                                                                                                                                                                            856 CCTGGCTCCAG 866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 73.7 res 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    13 ccrescrecas
                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
```

PAT 12-JUN-2003

linear

FEATURES

```
Unknown.
Unknown.
Unclassified.
I (bases 1 to 14)
Fauchet, C.R.J.
Flachet, C.R.J.
Fixing unit with an end imprint in a threaded terminal portion Patent: US 6632057-A 180 14-OCT-2003;
Location/Qualifiers
                                                                                                          1 (bases 1 to 14)
Tournier-Lasserve,E., Joutel,A., Bousser,M.-G. and Bach,J.-F.
Gene involved in cadasil, method of diagnosis and therapeutic
application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Georgopoulos, K.
Isolated antibody that binds to an Ikaros polypeptide
Patent: US 630141-A 108 07-0CT-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 85.7%; Pred. No. 5.7e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                  Query Match
3.7%; Score 10.8; DB 1; Length 1
Best Local Similarity 85.7%; Pred. No. 5.7e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA
           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 180 from patent US 6632057.
AR408087.1 GI:40158074
                                                                                                                                                                                                                                                                                                                                                                                                                            AR404828 14 bp m
Sequence 108 from patent US 6630141.
AR404828
                                                                                                                                                                                   Patent: US 6537775-A 64 25-MAR-2003;
Location/Qualifiers
          AR300262 14 bp I
Sequence 64 from patent US 6537775.
AR300262
                                                                                                                                                                                                               1. .14
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .14
/organism="unknown"
/wol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR404828.1 GI:40153555
                                                     AR300262.1 GI:31687681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  891 TTACTTCTCAGCTT 904
                                                                                                                                                                                                                                                                                                                              931 CCCTCCAGAGATT 944
                                                                                                                                                                                                                                                                                                                                                       1 cccrccadagar 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTACTTCCCACCTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 14)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                   Unknown.
                                                                                                 Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1147
                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
           LOCUS
DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR408087/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                 AR404828/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                  ORGANISM
                                                                                                                                          AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                      JOURNAL
                                                                    KEYWORDS
SOURCE
                                                                                                                              REFERENCE
AR300262
                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 08-AUG-2001
                                                                                                                                0
                                                                                                                                                                                                                                                             PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                 .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 10.8; DB 1; Length 14;
Pred. No. 5.7e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 10.8; DB 1; Length 14;
Pred. No. 5.7e+02;
0; Mismatches 2; Indels
                                                                                                 Score 10.8; DB 1; Length 14; Pred. No. 5.7e+02; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Withour Unclassified.

Unclassified.

E 1 (bases 1 to 14)

G Georgopoulos, K.

Tkaros: A T cell pathway regulatory gene
TAL Patent: US 6228611-A 108 08-MAY-2001;

Location/Qualifiers

14 "...known" 'nNA"
                                  1. .14
/organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 14)
Georgopoulos.K.
Ikaros polypeptides
Patent: US 5524770-A 108 20-OCT-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14 bp Di
Sequence 108 from patent US 6228611.
ARI49699.1 GI:15114290
                                                                                                                                                                                                                                                         14 bp DI Sequence 108 from patent US 5824770. AR049805. GI:5971797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="unknown"
/mol_type="unassigned DNA"
     Antibioticos, S.A
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.7%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.7%;
                                                                                                       Query Match 3.7%;
Best Local Similarity 85.7%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  891 TIACTICICAGCIT 904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTACTICICAGCTT 904
                                                                                                                                                                 931 CCCTCCAGAGAATT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14 TIACTICCCACCIT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tracircccaccrr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.73
Query Match
Best Local Similarity 85.73
Matches 12; Conservative
                                                                                                                                                                                          14 CTCTCGAGAGATT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1145
                                                                                                                                                                                                                                      RESULT 1143
AR049805/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1144
AR149699/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
```

PAT 18-DEC-2003

linear

. 0

Gaps

·,

Length 14;

DEFINITION

LOCUS

Q D

ACCESSION VERSION

KEYWORDS

AUTHORS TITLE JOURNAL

FEATURES

REFERENCE

0

Gaps

. 0

PAT 18-DEC-2003

linear

TITLE JOURNAL FEATURES

ð

REFERENCE AUTHORS

VERSION KEYWORDS

LOCUS

g à

```
source
                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1151
A89407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             source
                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1152
                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                   VERSION
KEYWORDS
SOURCE
                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                      REFERENCE
                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
             A87992/c
                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A89409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                      0;
                                                                                                                                                                           PAT 22-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 17-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                     synthetic construct
synthetic construct
artificial sequences.

1 (bases 1 to 15)
Ueda,I., Niwa,M., Saito,Y., Yamada,H. and Ishii,Y.
A process for the production of alpha-human atrial natriuretic polypeptide
Patent: EP 0206769-A 16 30-DBC-1986;
PUJISAWA PHARMACEUTICAL CO., LTD
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 15)
Ueda,I., Niwa,M., Saito,Y., Yamada,H. and Ishii,Y.
A process for the production of alpha-human atrial natriuretic
                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                          Length 14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 15;
                       Score 10.8; DB 1; Length 1
Pred. No. 5.7e+02;
0; Mismatches 2; Indels
                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                          3.7%; Score 10.8; DB 1;
85.7%; Pred. No. 6.2e+02;
ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                      /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A Lypeptide
polypeptide
Patent: EP 0440311-A 33 07-AUG-1991;
FUJISAWA PHARMACEUTICAL CO., LTD
Location/Qualifiers
/mol_type="unassigned RNA"
                                                                                                                                                                         ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15 bp
                                                                                                                                                                          15
                      ch 3.7%;
l Similarity 85.7%;
12; Conservative
                                                                                                                                                                       A15243
Oligonucleotide AH15.
A15243
A15243.1 GI:512691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 oligonucleotide AH15.
A16458
                                                                           899 CAGCITCIGCGAIC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                823 GGCIGIGICICITI 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   823 GGCIGIGICICITI 836
                                                                                            14 CAGCTTCTCCAATC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCTGTAACTCTTT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A16458.1 GI:489865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 GGCTGTAACTCTTT 14
                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.7
Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A16458
                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
                                                                                                                                             RESULT 1148
                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1149
A16458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
ACCESSION
                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                  Matches
                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                        KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                        A15243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                       LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

```
PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                    ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                  .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.7%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unidentified
unidentified
unclassified.
unclassified.
1 (bases 1 to 15)
Brysch, W. and Schlingensiepen, K.
ANTISENSE OLIGOMUCLEOTIDE PREPARATION METHOD
PAR ANTISENSE OLIGOMUCLEOTIDE PREPARATION
PALENL: WO 9833904-A 1555 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.7%; Score 10.8; DB 1; Length 1
85.7%; Pred. No. 6.2e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                              1 (bases 1 to 15)
Brysch, W. and Schlingensiepen, K.
AN ANTIESNSE OLIGONUCLEOTIDE PREPARATION METHOD
PATHER: WO 9833904-A 140 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 (bases 1 to 15)
Brysch, W. and Schlingensiepen, K.
AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1555 from Patent W09833904.
A89407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1557 from Patent W09833904. A89409
Sequence 140 from Patent WO9833904.

    .15
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="unassigned DNA"
/db_xref="taxon:32644"

    .15
    /organism="unidentified"

                                                            A87992.1 GI:6736562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 923 CACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A89407.1 GI:6737977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       705 CAGCGAGTCCCAGG 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A89409.1 GI:6737979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15 caccagcccccrcc 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.7
Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAGAGTCACAGG
                                                                                                 unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
```

```
RESULT 1157
AR041832/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1156
                         RESULT 1155
                                                LOCUS
DEFINITION
                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                              ORGANISM
                                                                                                                                                                     AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                            ACCESSION
                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KEYWORDS
                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                              AR041346
                                       AR041345
                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                         Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 29-SEP-1999
                                                                                                                                 .,
                                                                                                                                                                                                                                                   PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknows...
UnClassified.
1 (bases 1 to 15)
Wang, C.-G. and Hepburn, A.G.
Genetic sequence assay using DNA triple strand formation
Patent: US 5861244-A 35 19-JAN-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 15;
                                                                                                    Query Match
3.7%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 6.2e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2; Indels
                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                    An antisense oligomucleotide preparation method Patent: BP 0856579-A 140 05-AUG-1998; BIOGNOSTIK GES (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.7%; Score 10.8; DB 1;
llarity 85.7%; Pred. No. 6.2e+02;
Conservative 0; Mismatches 2;
Patent: WO 9833904-A 1557 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                              unclassified.
1 (bases 1 to 15)
Brysch, W.D. and Schlingensiepen, K.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR029846 15 bp L Sequence 35 from patent US 5861244. AR029846.1 GI:5943060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                        1. .15
/organism="unidentified"
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                  15 bp
Sequence 140 from Patent EP0856579.
A89959
                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         831 CTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                923 CACCACCACCTCC 936
                                                                                                                                                             928 CCACCTCCAGAGA 941
                                                                                                                                                                                                                                                                                             A89959.1 GI:6738473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14 CTTTTTTCTTCTTT 1
                                                                                                                                                                                      1 ccaccargcagaga 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACCAGCCCCCTCC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                        unidentified
                                                                                                                                                                                                                                                                                                                                       unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15
                                                                                                                                                                                                                                                                 DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                RESULT 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1154
AR029846/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                           A89959/c
                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                             FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                à
```

Db

```
[ Joses 1 to 15)
Sullivan, S., Draper, K., Kisich, K., Stinchcomb, D.T. and McSwiggen, J. TNF-.alpha. ribozyma, 622 22-SEP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 15)
Sullivan, S., Draper, K., Kisich, K., Stinchcomb, D.T. and McSwiggen, J.
TNF-, alpha. ribozymes
Patent: US 5811300-A 136 22-SEP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 29-SEP-1999
                                                                                                           Unknown.
Unknown.
Unclassified.
Unclassified.
Sullivan,S., Draper,K., Kisich,K., Stinchcomb,D.T. and McSwiggen,J.
Sullivan,S., Draper,R.,
TNF-.alpha. ribozymes
Patent: US 5811300-A 135 22-SEP-1998;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                      0;
PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                Query Match 3.7%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15 bp Di
Sequence 622 from patent US 5811300.
AR041832
AR041832.1 GI:5962328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AR041346 15 bp D1
Sequence 136 from patent US 5811300.
AR041346
AR041346.1 GI:5961842
AR041345 15 from patent US 5811300.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                /mol_type="unassigned DNA"
                                        AR041345
AR041345.1 GI:5961841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          939 AGAATTTTACGCAA 952
                                                                                                                                                                                                                                                                                                                                                                                               939 AGAATTTTACGCAA 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 AGAACTTTAAGCAA 14
                                                                                                                                                                                                                                                                                                                                                                                                                     2 AGAACTTTAAGCAA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
```

ö

Gaps

. 0

ORGANISM

KEYWORDS

SOURCE

AR041833 LOCUS

AUTHORS TITLE

REFERENCE

JOURNAL

FEATURES

PAT 16-MAY-2001

linear

```
3.7%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 6.2e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.7%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 6.2e+02;
Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 15;
                                                                                                               1 (bases 1 to 15)
Stinchcomb,D.T., Jarvis,T. and McSwiggen,J.
Nucleic acid based inhibition of CD40
Patent: US 6194150-A 196 27-FEB-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 15)
Stinchcomb.D.T., Jarvis,T. and McSwiggen,J.
Nucleic acid based inhibition of CD40
Patent: US 6194150-A 197 27-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 15)
Stinchcomb, D.T., Jarvis, T. and McSwiggen, J.
Nucleic acid based inhibition of CD40
Patent: US 6194150-A 1225 27-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR132800 15 bp DN
Sequence 1225 from patent US 6194150.
AR132800 GI:14121705
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 197 from patent US 6194150.
AR131772
AR131772.1 GI:14120675
 Sequence 196 from patent US 6194150.
AR131771
                                                                                                                                                                                                               /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.7%; Score 10.8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                   AR131771.1 GI:14120674
                                                                                                                                                                                                                                                                                                                           870 GAACACTITCCTGA 883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               870 GAACACTITICCIGA 883
                                                                                                                                                                                                                                                                                                                                                         2 GAGCATTTTCCTGA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGCATTTTCCTGA 14
                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 85.7
Matches 12, Conservative
                                                                                   Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                          AR131772
                                                                  Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                               SOURCE
                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1162
                                                                                                                             AUTHORS
TITLE
JOURNAL
FEATURES
 DEFINITION
                ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
TITLE
JOURNAL
                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                       AR131772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR132800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                .
0
                                                                                                                                                                                                                                         PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 31-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                1 (bases I to 15)
Sullivan, S., Draper, K., Kisich, K., Stinchcomb, D.T. and McSwiggen, J.
TNF-.alpha. ribozymes
Patent: US 5811300-A 623 22-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAT 16-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 (bases 1 to 15)
Durmowicz, G.P., Harris, J.M. and Yanson, K.Dilly.
Detection of Neisseria gonorrhoeae by amplification and detection of its nucleic and part of its ncleic and parent: US 5962273-A 27 05-0CT-1999,
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                               Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.7%; Score 10.8; DB 1; Length 15;
85.7%; Pred. No. 6.2e+02;
ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                         linear
                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                          Score 10.8; DB 1;
Pred. No. 6.2e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.7%; Score 10.8; DB 1;
85.7%; Pred. No. 6.2e+02;
ative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DNA
                                                                                                                                                                                                                                      AR041833 15 pp D1 Sequence 623 from patent US 5811300.
          /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 27 from patent US 5962273. AR078087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR078087.1 GI:10004833
                                                                                                                                                                                                                                                                                   AR041833.1 GI:5962329
                                                            3.7%;
85.7%;
                                                                                                                        863 CCAGITGGAACACT 876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              810 CCAACTCAGGGTTG 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 830 TCTCTTTTCTC 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 ccaacrcaecere 15
                                                          Query Match
Best Local Similarity 85.74
Matches 12; Conservative
                                                                                                                                                      15 ccagcrddaagacr 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.7%
Query Match
Best Local Similarity 85.7%
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTTTTATCTTCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                    Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                    AR041833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR131771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1160
AR131771
LOCUS
                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
source
                                                                                                                                                                                                        RESULT 1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1159
AR078087/c
```

LOCUS

БЪ

ACCESSION VERSION

KEYWORDS

SOURCE

ORGANISM

AUTHORS TITLE

JOURNAL

FEATURES

REFERENCE

0

Gaps

.; 0

PAT 16-MAY-2001

linear

```
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   850 CAGCGTCCTGGCTC 863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     798 AAGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             I61810.1 GI:2479758
                   798 AAGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 AAGACTTCTCCTCC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCCTCCAGGCTC 15
                                                              2 AAGACTTCTCCTCC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
Unclassified.
1 (bases 1 to 15)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.
                                                                                                                                                                                                                                                                                                                     Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1167
161810/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1166
I61730
                                                                                                                                      RESULT 1165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                               ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURES
                                                                                                                                                    909191
                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                          uncreasiled:

I (Asses I to 15)

State of Neisseria gonorrhoeae by amplifying and detecting nucleic acid of Neisseria gonorrhoeae

Interior of Neisseria gonorrhoeae

Attifical Sequence

PR 34-MG-1999;

PR 34-MG-1999

PR 30-OCT-1998 UP 1998309591

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PAT 07-0CT-1997
                                                                                                                                                                                                                            E35668 15-JUN-2001 Detection of Neisseria gonorrhoeae by amplifying and detecting nucleic acid of Neisseria gonorrhoeae.
                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
3.7%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 6.2e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 3.7%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unclassified.
Unclassified.
E I (bases 1 to 15)
S Stinchcomb, D.T., Draper, K.G. and McSwiggen, J.
Rel a targeted ribozymes
AL Patent: US 5658780-A 95 19-AUG-1997;
Location/Qualifiers
  Pred. No. 6.2e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15 bp 1
Sequence 95 from patent US 5658780.
161541.
161541.1 GI:2479489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unknown"
/wol_type="unassigned DNA"

    .15
    /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                    E35668.1 GI:13019144
JP 1999225781-A/27.
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     830 TCTCTTTTCTCTC 843
                                                                       836 TICTICICIGAAGA 849
                                                                                               1 TGCTCCTCTGAAGA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14 rctritarchicki 1
                               12; Conservative
                                                                                                                                                                                                                                                                                                                                                                       unidentified
unidentified
unclassified.
    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1164
                                                                                                                                                                                           RESULT 1163
                                                                                                                                                                                                                                                                                                                                                                       SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                E35668/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              161541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                   g
```

```
PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
        PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                         Query Match

3.7%; Score 10.8; DB 1; Length 15;
Best Local Similarity 85.7%; Pred. No. 6.2e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.7%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases 1 to 15)
Stinchcomb.D.T., Draper,K.G. and McSwiggen,J.
Rel a targeted blozymes
Patent: US 5658780-A. 284 19-AUG-1997;
Location/Qualifiers
                                                                                                                                                                (bases 1 to 15)
Stinchcomb.D.T., Draper,K.G. and McSwiggen,J.
Rel a trargeted ribozymes
Patent: US 5558780-A 160 19-AUG-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15 bp Di
Sequence 364 from patent US 5658780.
161810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15 bp Di
Sequence 284 from patent US 5658780.
161730.
161730.1 GI:2479678
15 bp D1 Sequence 160 from patent US 5658780. 161606.1 GI:2479554
                                                                                                                                                                                                                                                                   1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
```

```
Unknown.
                                                                                              Unknown
                                                                                                         Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unknown
      RESULT 1170
                                                                                                                                                                                                                                                                                                                                                           RESULT 1171
AR300257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                               LOCUS
                                                                                                         ORGANISM
                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                   AR183495/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1172
                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AR349717/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCUS
                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                 ;
0
                                                                                                                                                                                                                                            PAT 03-APR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·,
                                                                                                       Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unclassified.

1 (bases 1 to 15)
Vogelstein, B., Kinzler, K.W., Zhang, L. and Zhou, W.
Gene expression profiles in normal and cancer cells
Patent: US 6331152-A 421 25-DEC-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.7%; Score 10.8; DB 1; Length 15, 85.7%; Pred. No. 6.2e+02; tive 0; Mismatches 2; Indels
                                                                                                                              2; Indels
                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 15)
McSwiggen,J., Draper,K., Pavco,P. and Woolf,T.
Respiratory syncytial virus ribozymes
Patent: US 5693532-A 526 02-DEC-1997;
Stinchcomb,D.T., Draper,K.G. and McSwiggen,J. Rel a targeted ribozymes
Patent: US 5658780-A 364 19-AUG-1997;
                                                                                                    Score 10.8; DB 1;
Pred. No. 6.2e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                      Sequence 526 from patent US 5693532. 177819.1 GI:3013973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 421 from patent US 6333152.
                                                  1. .15
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .15
/organism="unknown"
/wol_type="unassigned DNA"
                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AR180353.1 GI:20222386
                                                                                                3.78;
                                                                                                                                                   840 TCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       910 ATCAGATTATCATC 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              915 ATTATCATCACCAC 928
                                                                                                                                                                    14 TCTGTGAACACAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 Argercarcaccac 15
                                                                                                                          12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 ATAATATTATCATC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 85.7<sup>th</sup>
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                             Unclassified.
                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unknown.
                                                                                                   Query Match
                                                                                                                                                                                                              RESULT 1168
177819/c
LOCUS
DEFINITION
                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                        source
           TITLE
JOURNAL
                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1169
                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCUS
                                                                                                                                                                                                                                                             ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
 AUTHORS
                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
SOURCE
                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR180353
                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
```

```
PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                             ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAT 12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unclassified.

1 (bases 1 to 15)

Drysdale, C.M., Judson, R.S., Liggett, S.B., Nandabalan, K., Stack, C.B. and Stephens, J.C.
Association of .beta.2-adrenergic receptor haplotypes with drug
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 15)
Tournier-Lasserve, E., Joutel, A., Bousser, M.-G. and Bach, J.-F. Gene involved in cadasil, method of diagnosis and therapeutic application
Patent: US 6537775-A 59 25-MAR-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                            Adams, C.W., Carter, P.J., Fendly, B.M. and Gurney, A.L. Agonist antibodies.
Patent: Use 5342220-A 42 29-JAN-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                             3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 3.7%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
Sequence 42 from patent US 6342220. AR183495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AR300257 15 bp D
Sequence 59 from patent US 6537775.
AR300257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 response
Patent: US 6586183-A 12 01-JUL-2003;
                                                                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR349717 15 bp 1
Sequence 12 from patent US 6586183.
AR349717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                     /organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="unknown"
                                                            AR183495.1 GI:20227464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AR300257.1 GI:31687676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR349717.1 GI:33750528
                                                                                                                                                                                                                                                                                                                                                                                                                        860 GCTCCAGTTGGAAC 873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            713 CCCAGGAGAGTGAC 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 cccasercaercae 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                             15 ścrccagragradc 2
                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                               Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unclassified.
                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
```

à

```
840 TCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          798 AAGAGCTCTCCTCC 811
           850 CAGCGTCCTGGCTC 863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 AAGACTTCTCTCTC 15
                                       2 cháccrcchadacrc 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        unidentified
unidentified
unclassified.
                                                                                                                                                                                         unidentified
unidentified
unclassified.
                                                                                   RESULT 1175
AX636035
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1176
AX636183/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                         ORGANISM
                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                  ACCESSION
                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
              à
                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Method and reagent for inhibiting the expression of disease related
                                                                                                      .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 21-FEB-2003
                                                                                                                                                                                                                                          PAT 17-AUG-2003
                                                                                                                                                                                                                                                                                                                                               Unclassified.

1 (bases 1 to 15)

Drysdale, C.M., Judson, R.S., Liggett, S.B., Nandabalan, K., Stack, C.B. and Stephens, J.C.
Association of .beta.2-adrenergic receptor haplotypes with drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Makulic-Adamic, J., Moswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.7%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; ative 0; Mismatches 2; Indels
                                                                           Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                           linear
                                                                                                       2; Indels
                                                                        Query Match 3.7%; Score 10.8; DB 1; Best Local Similarity 85.7%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            genes
Patent: EP 1260586-A 3103 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15 bp Rl
EP1260586.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Patent: US 6586183-A 13 01-JUL-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                AR349718 15 bp
Sequence 13 from patent US 6586183.
AR349718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1. .15
/organism="unknown"
/mol_type="genomic DNA"
               1. .15
/organism="unknown"
/mol_type="genomic DNA"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3103 from Patent
AX635964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AX635964.1 GI:28471578
                                                                                                                                                                                                                                                                                      AR349718.1 GI:33750529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            763 AGGCCTCCACTTCT 776
                                                                                                                                       928 CCACCTCCAGAGA 941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14 AGGCCACCACTGCT 1
                                                                                                                                                        || ||||||||| ||
15 CCGCCTCCAGGGA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                            response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX635964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Woolf, T.
                                                                                                                                                                                                                                                                                                                    Unknown.
                                                                                                                                                                                                                                                                                                                                     Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1174
AX635964
                                                                                                                                                                                                               RESULT 1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                               AR349718/c
                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                         ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                              TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                   g
```

```
Woolf,T.
Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                  Method and reagent for inhibiting the expression of disease related
   PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                               Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Swedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and Woolf, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·:
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.7%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.7%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 2; Indels
      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent: BP 1260586-A 3322 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent: BP 1260586-A 3174 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
AX636035 15 bp RN
Sequence 3174 from Patent EP1260586.
AX636035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AX636183 15 bp R3
Sequence 3322 from Patent EP1260586.
AX636183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mol_type="unassigned_RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"

    .15
    /organism="unidentified"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                             AX636035.1 GI:28471649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AX636183.1 GI:28471797
```

```
PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                       Woolf, \Gamma. Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Woolf,T. Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                       Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Swedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.7%; Score 10.8; DB 1; Length 15; B5.7%; Pred. No. 6.2e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 15;
                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.7%; Score 10.8; DB 1;
85.7%; Pred. No. 6.2e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                            genes
Patent: BP 1260586-A 3987 27-NOV-2002,
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         genes
Patent: EP 1260586-A 4450 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                 Ax636848 15 bp R1
Sequence 3987 from Patent EP1260586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 4450 from Patent EP1260586. AX637311
                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"

    .15
    /organism="unidentified"
    /mol_type="unassigned RNA"
    /db_xref="taxon:32644"

                                                                                                      AX636848.1 GI:28472462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AX637311.1 GI:28472925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      939 AGAATTTTACGCAA 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     863 CCAGTIGGAACACT 876
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AGAACTTTAAGCAA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15 ccagcradaagacr 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                           unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 12; Conserv:
                                                                                    AX636848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1180
                                                                                                                                                                  ORGANISM
                                                               DEFINITION
                                                                               ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX637311/c
                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                           AUTHORS
                                                                                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                          AX636848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AX637313
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                      PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                         Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                      Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.B. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 3.7%; Score 10.8; DB 1; Length 15; Best Local Similarity 85.7%; Pred. No. 6.2e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                               Patent: EP 1260586-A 3363 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fatent: EP 1260586-A 3985 27-NOV-2002; RIBOZYME PHARMACEUTICALS, INC. (US) Location/Qualifiers
                                                                                            Sequence 3363 from Patent BP1260586. AX636224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3985 from Patent EP1260586. AX636846.1 GI:28472460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                     AX636224.1 GI:28471838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       798 AAGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    939 AGAATTTTACGCAA 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 AAGACTICICCICC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 AGAACTTTAAGCAA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
14 TCTGTGAACACAGC
                                                                                                                                                                                            unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unidentified
                                                                                                                                                                                                                                                                                                                                                          Woolf, T.
                                                                                                                                                                                                                                                                                                                                                                                                 genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1178
AX636846
LOCUS
DEFINITION
SACCESSION
VERSION
KEYWORDS
                                                     AX636224
LOCUS
                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sonrce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                        REFERENCE
                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
```

ò g

ö

. 0

PAT 21-FEB-2003

linear

RNA

15 bp

AX637313

ð

DEFINITION ACCESSION VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE AUTHORS

JOURNAL

FEATURES

```
Synthetic construct
synthetic construct
synthetic construct
artificial sequences.

I (bases 1 to 15)
Sasaki,S., Nagatsugi,F., Kawasaki,T., Usui,D. and Maeda,M.
2-Aminopurine derivative
L Patent: JP 200120686-A 1 31-JUL-2001;
HISANITSU PHARMACEUTICAL CO INC
OS Artificial Sequence
PN JP 200120686-A/1
PD 31-JUL-2001
PP 31-JUL-2001
PP G4-SEP-2000 JP 2000267330
PI SHIGEKI SASAKI,FUMI NAGATSUGI,TAKESHI KAWASAKI,DAISAKU USUI,
                                                                                                                                                                                                                                                                                                                                                  A61P43/00,C12N15/00
Description of Artificial Sequence:synthetic polynucleotide FH
:v Location_Qualifiers
                                                                                                                                                                         OS Artificial Sequence
PN JP 2001206896-A/1
PN 31-QLL-2001
PP 031-QLD-2000 JP 2000267330
PI SHIGEKI SASAKI, FUMI NAGATSUGI, TAKESHI KAWASAKI, DAISAKU USUI
PI MINORU MAEDA
PC C07H19/173,C07H21/04,C12N15/09//A61K31/7076,A61K31/7115,A61K48/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          An antisense oligonucleotide preparation method Patent: JP 2001511000-A 140 07-AUG-2001; BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-1998 JP 1998532533
31-JAN-1997 EP 97101531.8
KARL HERMANN SCHLINGENSIEPERN, WOLFGANG BRYSCH
C12N15/11, C07121/04, A61K31/70
An antisense oligonucleotide preparation method FH
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 85.7%; Pred. No. 6.2e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.7%; Score 10.8; DB 1; Length 15; 80.0%; Pred. No. 6.2e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15 bp DNA lines
An antisense oligonucleotide preparation method.
PD065505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    organism='Unknown'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .15
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BD065505.1 GI:22611108
JP 2001511000-A/140.
unidentified
unclassified.
unclassified.
1 (bases 1 to 15)
Schlingensiepen,K.H. and Brysch,W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .15
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown
JP 2001511000-A/140
07-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       825 CIGIGICICITITCI 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CTTTNÍCICCTTÍCT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
2001206896-A/1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BD065505/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                              REFERENCE
                                                                                                 AUTHORS
                                                                                                                                        JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                     TITLE
                                                                                                                                                                               COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                          Stinchcomb,D.T., Dudycz,L.W., Chowrira,B., Grimm,S., Direnzo,A., Karpeisky,A., Draper,K.G., Kisich,K., Matulic-Adamic,J., Mcak,Ger,J.A., Modak,A., Pavco,P., Beigelman,L., Sullivan,S.M., Sweedler,D., Thompson,J.D., Tracz,D., Usman,N., Wincott,F.E. and Woolf,T.
Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Method and reagent for inhibiting the expression of disease related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Suskayigaen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.B. and Woolf, T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; rive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                 Patent: EP 1260586-A 4452 27-NOV-2002;
RIBOZYME PHARMACEUTICALS, INC. (US)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent: EP 1260586-A 5496 27-NOV-2002;
  Sequence 4452 from Patent BP1260586.
AX637313
AX637313.1 GI:28472927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 bp R
Seguence 5496 from Patent EP1260586.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                               /organism="unidentified"
/mol_type="unassigned RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RIBOZYME PHARMACEUTICALS, INC. (US) Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .15
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD015524
2-Aminopurine derivative.
BD015524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD015524.1 GI:22556661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX638357.1 GI:28473971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           910 ATCAGATTATCATC 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            810 CCAACTCAGGGTTG 823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCAACTCAGCGCTG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATARTATARCATC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               unidentified
unidentified
unclassified.
                                                                                unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AX638357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genes
                                                                                                                                                                                                                                                                                      genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1182
AX638357/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LOCUS
DEFINITION
```

ORGANISM

REFERENCE AUTHORS

JOURNAL

FEATURES

DEFINITION

LOCUS

셤

à

ACCESSION VERSION

KEYWORDS

SOURCE

.. 0

Gaps

;

Ы

PAT 27-AUG-2002

·;

Gaps

0;

ACCESSION VERSION

BD015524

Qγ

Key

rge.res

```
860 GCTCCAGTTGGAAC 873
                                                                                                                                                            1 ccaccargcagaga 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15 GCTCCAGTAGTAAC 2
                                                                                                           Conservative
                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              thereof
                                                                                                                                                                                                                                                                                                                                                                                                          use thereof
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              감물품당
               source
                                                                                                                                                                                                     RESULT 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1188
                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                   BD080968/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BD103565
                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                    ò
                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Db
                                                                                                        PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAT 27-AUG-2002
                                                                                                                  AUTHORS Schlingensiepen, K.H. and Brysch, W.
TITLE An antisense oligonucleotide preparation method
JOURNAL Patent: UP 201511000-A 1555 07-AUG-2001;
BLOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
OS UNKnown 1511000-A/1555
PD 07-AUG-2001
PF 30-JAN-1998 UP 1998632533
PR 31-JAN-1997 EP 971015-7
PC C12N15/1*
                                                                                                                                                                                                                                                                                                                                                                              Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Schlingensiepen, K.H. and Brysch, W. Schlingensiepen, K.H. and Brysch, W. An antisense oligonucleotide preparation method Patent: JP 201511000-A 1557 07-AUG-2001;
BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
                                                                                                                                                                                                                                                                                      DP 2001510000-A/1555
07-AUG-2001
31-GAN-1999 BP 1998532533
31-GAN-1997 EP 97101531.8
KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
C12N15/11, C07H21/04, AGIK31/70
An arthisense oligonucleotide preparation method FH
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-JAN-1997 EP 97101531.8
KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
C12N15/11,C07H21/04,A61K31/70
An antisense oligonucleotide preparation method FH
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 15;
                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BD066922 15 bp DNA linear An antisense oligonucleotide preparation method. BD066922 1 GI:22612525 JP 2001511000-A/1557.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2; Indels
                                                                                                  BD066920
An antisense oligonucleotide preparation method.
BD066920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
                                                                                                                                                                                                                                                                                                                                                                                                    ce 1. .15
/organism='Unknown'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism='Unknown'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.7%; Score 10.8; D
85.7%; Pred. No. 6.2e
ttive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                             1. .15
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-AUG-2001
30-JAN-1998 JP 1998532533
31-JAN-1997 EP 97101531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JP 2001511000-A/1557
         CACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 705 CAGCGAGTCCCAGG 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 chdadadrcached 15
                                 15 caccadececerce 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        923
                                                                                    BD066920
LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                          RESULT 1185
                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LOCUS
DEFINITION
                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                     TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BD066922
                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
        à
                                Пb
```

ŏ g

```
Patent: JP 2001513999-A 22 11-SEP-2001;
GENEWIECH INC
OS Homo sapiens (human)
BN JP 2001513999-A/22
PD 11-SEP-2001
PP 21-AG-1998 UP 2000507802
PR 25-AUG-1997 US
PR 25-AUG-199
                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BD080968 15 bp DNA linear PAT 27-AUG-2002 Agonist antibodies against thrombopoietin receptor and therapeutic use thereof.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BD103565 15 bp DNA linear PAT 27-AUG-2002 Variant preproneuropeptide Y, DNA molecule encoding variant signal peptide and utilization of the same.
BD103565 BD103565.1 GI:22649139
JP 2001526296-A/9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo. 1 (Boss 1 to 15)
Adams, C.W., Carter, P.J., Fendly, B.M. and Gurney, A.L. Agonist antibodies against thrombopoietin receptor and therapeutic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Agonist antibodies against thrombopoietin receptor and
                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .15
/organism='Homo sapiens (human)'.
                                                                                                                                                                                                                                                                                                      3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.7%; Score 10.8; DB 1; Length 15; larity 85.7%; Pred. No. 6.2e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers

    .15
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. .15
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD080968
BD080968.1 GI:22626571
JP 2001513999-A/22.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         therapeutic use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     928 CCACCCTCCAGAGA 941
```

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                                                         ð
            unclassified.

unclassified.

I (bases 1 to 15)

S (vollu, M., Farvonen, W., Pesonen, U. and Tusitupa, M.

Variant preproneuropeptide Y, DNA molecule encoding variant signal peptide and utilization of the same

I Patent: JP 201526296-A 9 18-DEC-2001;

HORMOS MEDICAL OY LTD

OS Unidentified

PN JP 2001526296-A/9

PP 16-DEC-1998 JP 200525455

PP 16-DEC-1998 JP 200525455

PP 19-DEC-1999 JG 20099946

PI MARKKU KOULU, MATTI KARVONEN, ULLAWARI PESONEN, MATTI UUSITUPA PC

COUNTA4/575, A01K67/027, A61K38/00, A61K38/00, A61P3/06, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BD209016
Enzymatic nucleic acid treatment of diseases or conditions related to hepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                C07K16/26, C12N5/10, C12N15/09, C12Q1/68, G01N33/15, G01N33/50// PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     unidentified
unclassified.
1 (bases I to 15)
Blatt, L., Mcswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.
Enzymatic nucleic acid treatment of diseases or conditions related
to hepatitis C vinus infection
Patent: JP 2002512791-A 2006 08-MAY-2002;
RIBOZYME PHARMACEUTICALS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DENNIS MACEJAK
C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
A61K37/66,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OS Hepatitis virus (hepatitis C virus)
PN UP 2002512791-A/2606
PD 08-MAY-2002
PF 26-APR-1999 UP 2000545991
PR 27-APR-1999 US 60/083217,18-SEP-1998 US 60/100842 PR 25-FEB-1999 US 09/257608,03-MAR-1999 US 09/274553 PI
LAWRENCE BLATT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A PI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Enzymatic nucleic acid treatment of diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.7%; Score 10.8; DB 1; Length 15; ilarity 85.7%; Pred. No. 6.2e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .15
/organism='Unidentified'
                                                                                                                                                                                                                                                                                                                                           AGIK37/02,AGIK37/24,Cl2N5/00,Cl2N15/00
Strandedness: Single;
Topology: Linear;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .15
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        related to hepatitis C virus infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BD209016.1 GI:33018786
                                                                                                                                                                                                                                                                                                                                                                                                                 /desc = 'primer'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JP 2002512791-A/2606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             748 GGTCCCAGGGTCCC 761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGICCCGCGGICCC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                               C12P21/08,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                A61P43/00,
PC C07K16
                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BD209016/c
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
SOURCE
                                                         AUTHORS
                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
```

```
E 1. (Lases 1 to 15)

Blatt, L., Mcswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.

Blatt, L., Mcswiggen, J.A., Roberts, E., Pavco, P.A. and Macejak, D.

Braymatic modeled acid treatment of diseases or conditions related to hepatitis C virus infection

Bracht: JP 2002512791-A 2607 08-MAY-2002;

RIBOZYME PHARMACEUTICALS INC

OS Hepatitis virus (hepatitis C virus)

PR 26-APR-1999 UP 2000545991

PR 27-APR-1999 US 60/083217,18-SEP-1998 US 60/100842 PR 25-REB-1999 US 09/257608,23-MAR-1999 US 09/274553 PI

LAMRENE BLATT, JAMES A MCSWIGGEN, ELISABETH ROBERTS, PAMELA A PI

PAVCO,
                                                                                                                                                                          ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ပ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 14-MAR-1995
                                                                                                                                                                                                                                                                                                                      RNA linear PAT 17-JUL-2003 of diseases or conditions related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C12N9/00,A61K31/7105,A61K38/21,A61K48/00,A61P31/12,C12N15/09,
A61K37/66,
           \mathbf{F}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Enzymatic nucleic acid treatment of diseases or conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                            Gaps
             υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism='Hepatitis virus (hepatitis C
           organism='Hepatitis virus (hepatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                          0
                                                                                                                                        ch 3.7%; Score 10.8; DB 1; Length 15; I Similarity 85.7%; Pred. No. 6.2e+02; 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.7%; Score 10.8; DB 1; Length 15; 85.7%; Pred. No. 6.2e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                 Enzymatic nucleic acid treatment to hepatitis C virus infection. BD209017.1 GI:33018787

    .15
    /organism="unidentified"

                                                              1. .15
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                         /mol_type="genomic RNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ďq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             virus)'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A26042
polynucleotide 16C22.
                                (Strike
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Llarity 85.7%;
Conservative
                                                                                                                                                                                                          717 GGAGAGTGACTCTG 730
                                                                                                                                                                                                                                                                                                                                                                                                     JP 2002512791-A/2607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         714 CCAGGAGAGTGACT 727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DENNIS MACEJAK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14 CCTGGAGAGTAACT 1
                                                                                                                                                                                                                                          14 GGAGAGTAACTATG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                C12N15/00
                                                                                                                                                                                                                                                                                                                                                                                                                                   unidentified unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                        unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 12; Conserv
 source
                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  H C L C L C L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FFEC
FT
                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1191
A26042/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
                                                                source
                                                                                                                                                                                                                                                                                         RESULT 1190
                                                                                                                                                                                                                                                                                                                         LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                          BD209017/c
                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURES
                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
```

```
16 crecreceardade
                                                                                                                                                                                                                                                unidentified
unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
"Local 12; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best_Local Similarity
Matches 12; Conserv
                                                                                                                                                                                A89972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A90157
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1195
A90157/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1196
AR029815
                                                                                                                                                     RESULT 1194
                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
JOURNAL
                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                        VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VERSION
                                                                                                                                                                                                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                            PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAT 22-JAN-2000
                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                         Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.7%; Score 10.8; DB 1; Length 16; 85.7%; Pred. No. 6.6e+02; arive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                      unidentified
unclassified.
1 (Lases 1 to 16)
Brysch, W. and Schlingensiepen, K.
AN ANTISENSE OLIGONUCLEOTIDE PREPARATION METHOD
PARENT: WO 9833904-A 153 06-AUG-1998;
BIOGNOSTIK GES (UE); BRYSCH WOLFGANG (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 16)
Brysch, W. and Schlingensiepen, K.
AN ANTISENSE OLICONUCLEOTIDE PREPARATION METHOD
PATENT: WO 9833904-A 338 06-AUG-1998;
BIOGNOSTIK GES (DE); BRYSCH WOLFGANG (DE)
Location/Qualifiers
                                                                                                                                                                                                     Query Match 3.7%; Score 10.8; DB 1; Best Local Similarity 85.7%; Pred. No. 6.6e+02; Matches 12; Conservative 0; Mismatches 2;
                                                                                                                                                  /organism="synthetic construct"
/mol_type="unassigned DNA"
/db_xref="taxon:32630"
                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                            Patent: FR 2680520-A 37 26-FEB-1993;
                                                                                                                                                                                                                                                                                                                                                      Sequence 153 from Patent WO9833904.

    .16
    /organism="unidentified"
    /mol_type="unassigned DNA"
    /db_xref="taxon:32644"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 bp
Sequence 338 from Patent WO9833904.
A88190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1. 16
/organism="unidentified"
                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                    synthetic construct
artificial sequences.
1 (bases 1 to 16)
                                                                                                                                                                                                                                                             778 AGGGCAGCCCCTCT 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A88190.1 GI:6736760
                                                                                                                                                                                                                                                                                                                                                                                                 A88005.1 GI:6736575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         776 TGAGGCCAGCCCCT 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 TGGGGCAGCGCCT 16
               A26042.1 GI:904814
                                       synthetic construct
                                                                                                                                                                                                                                                                                     16 AGTCCAGCCCCTCT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 85.7
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unidentified
unidentified
unclassified.
A26042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                              RESULT 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1193
                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                            AUTHORS
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
JOURNAL
              VERSION
KEYWORDS
SOURCE
 ACCESSION
                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A88190/c
                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCUS
                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ρβ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
.
0
                                                                                                                                                                                                                                                        PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 22-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·
                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                             ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                    Score 10.8; DB 1; Length 16;
Pred. No. 6.6e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cch 3.7%; Score 10.8; DB 1; Length 16; al Similarity 85.7%; Pred. No. 6.6e+02; 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.7%; Score 10.8; DB 1; Length 16; 85.7%; Pred. No. 6.6e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 16)
Brysch, W.D. and Schlingensiepen, K.D.
An antisense oligonucleotide preparation method
Patent: EP 0856579-A 153 05-AUG-1998;
BIOGNOSTIK GES (DE)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             unclassified.

1 (bases 1 to 16)

Brysch, W. D. and Schlingensiepen, K.D.
An antisense oligonucleotide preparation method Patent: EP 0856579-A 338 05-AUG-1998;
BIOGNOSTIK GES (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="unidentified"
/mol_type="unassigned DNA"
/db xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Loup 1
Sequence 338 from Patent EP0856579.
A90157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                    Sequence 153 from Patent EP0856579.
A89972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .16
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 bp
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                      3.7%;
85.7%;
                                                                                                                790 CTGGTGCCAAGAGC 803
                                                                                                                                                                                                                                                                                                               A89972.1 GI:6738486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          776 TGAGGCCAGCCCCT 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   790 CTGGTGCCAAGAGC 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 TGGGGCAGCGCT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A90157.1 GI:6738671
                                    Query Match
Best Local Similarity 85.7
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16 crecreccareacc 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
```

```
Ouery Match
Best Local Similarity 85.7%
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                  12; Conservative
                                                                                                                                                                                                                                             Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                  Unknown
                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
ACCESSION
VERSION
                                                                                                                             RESULT 1199
AR139941/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1200
AR140260/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AR140538/c
LOCUS
                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
FEATURES
                                                                                                                                                                             ACCESSION
VERSION
                                                                                                                                                                                                                                                                     AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                        KEYWORDS
                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PAT 29-SEP-1999
PAT 29-SEP-1999
                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                               PAT 29-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
Unclassified.
Unclassified.
1 (Dases 1 to 16)
Hinrichs,S.H. and Orten,D.Jo.
Methods for inhibiting transcription of the cyclic AMP responsive element binding protein and the activating transcription factor 1
Patent: US 5844096-A 5 01-DEC-1998;
Location/Qualifiers
                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                    Unknown.
Unclassified.
Unclassified.
Unclassified.
Unclassified.

Wang, C.-G. and Hepburn, A.G.
Genetic sequence assay using DNA triple strand formation
Patent: US 5861244-A 4 19-UAN-1999;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unclassified.

1 (bases 1 to 16)

1 (bases 1 to 16)

1 (bases 2 to 16)

Genetic sequence assay using DNA triple strand formation Patent: US 5861244-A 29 19-JAN-1999;

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                             ·
0
                                                                                                                                                                                                                      Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 16;
                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
 linear
                                                                                                                                                                                                                                             2; Indels
                                                                                                                                                                                                                   Query Match 3.7%; Score 10.8; DB 1; Best Local Similarity 85.7%; Pred. No. 6.6e+02; Matches 12; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.7%; Score 10.8; DB 1;
ilarity 85.7%; Pred. No. 6.6e+02;
Conservative 0; Mismatches 2;
 DNA
                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                        AR029840
Sequence 29 from patent US 5861244.
AR029840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AR063220 16 bp
Sequence 5 from patent US 5844096.
AR063220 GI:5990911
AR029815
Sequence 4 from patent US 5861244
AR029815.1 GI:5943029
                                                                                                                                                                                                                                                                                                                                                                                                  AR029840.1 GI:5943054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      831 CTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                      830 TCTCTTTTCTC 843
                                                                                                                                                                                                                                                                                            1 TCTCTTTCCCTCTC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CICICITCAICICE 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16
                                                                                                                                                                                                                                                                                                                                                  AR029840/c
LOCUS
DEFINITION
                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                     RESULT 1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1198
            DEFINITION
ACCESSION
                                                                           ORGANISM
                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AR063220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
```

```
ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 16-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 16-JUN-2001
                                                                                                                                                                                                               PAT 16-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unclassified.

Unclassified.

(bases 1 to 16)

Zsebo, K.M., Bosselman, R.A., Suggs, S.V. and Martin, F.H.

Method for enhancing the effciency of gene transfer with stem cell
factor (SCF) polypeptide

Patent: US 6207454-A 13 27-MAR-2001;

Location/Qualifiers
                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                    1. (bases 1 to 16)
Zsebo,K.M., Bosselman,R.A., Suggs,S.V. and Martin,F.H.
DNA encoding stem cell factor
Patent: US 6207417-A 13 27-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 3.7%; Score 10.8; DB 1; Length 16; Best Local Similarity 85.7%; Pred. No. 6.6e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.7%; Score 10.8; DB 1; Length 16;
85.7%; Pred. No. 6.6e+02;
tive 0; Mismatches 2; Indels
  Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                        2; Indels
                                                                                                                                                                                                                 linear
3.7%; Score 10.8; DB 1;
85.7%; Pred. No. 6.6e+02;
Live 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                 DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      l6 bp is Sequence 13 from patent US 6207454. AR140260 AR140260.1 GI:14482756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                               AR139941 16 bp 1 Sequence 13 from patent US 6207417. AR139941.1 GI:14482437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AR140538 16 bp 1 Sequence 13 from patent US 6207802. AR140538 AR140538.1 GI:14483034
                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .16
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       718 GAGAGTGACTCTGG 731
                                                                              792 GGTGCCAAGAGCTC 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          718 GAGAGTGACTCTGG 731
                                                                                                          2 GGGGTCAAGAGCTC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 GACACTGACTCTGG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16 GACACTGACTCTGG 3
```

```
Location/Qualifiers
                                                                                                                                                                     763 AGGCCTCCACTTCT 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     916 TTATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    I26252.1 GI:1606122
                                                                                                                                                                                       3 AGGCCTCCCTGCT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  778 AGGCCAGCCCCTCT 791
                                                                                                                                                                                                                                                                                                    I07129.1 GI:590350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 TTATCATCATCATC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 85.7°
Matches 12; Conservative
                                                                                                                                             12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .16
                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                                                                                               Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
                                                                                                                                                                                                                                                               107129
 FF
                                                      source
                                                                                                                                                                                                                                                                          DEFINITION
ACCESSION
                                                                                                                                                                                                                                 RESULT 1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1205
                                                                                                                                                                                                                                                                                                                               SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 126252/c
                                        FEATURES
                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                               107129
Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                     VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
                                                                                                                                                                        à
                                                                                                                                                                                              엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  o,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 bp DNA linear PAT 18-JUN-2001
Improved PCR method for primer elongation pre-amplification.
B39139
                                                                                                                                                                                                                                                                                                                 PAT 17-0CT-2001
                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic construct
synthetic construct
artificial sequences.
I bases I to 16)
Urufuganku, D. and Joseph, R.
Improved PCR method for primer elongation pre-amplification
Patent: JP 19993146498-A 5 24-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                               0;
                                               I (bases 1 to 16)
Zsebo,K.M., Bosselman,R.A., Suggs,S.V. and Martin,F.H.
Stem cell factor and compositions
Patent: 18 6207802-A 13 27-MAR-2001;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 16)
Wellstein, A. and Czubayko, F.
Inhibition of an FGF-binding protein using ribozymes
Patent: 18 6245748-A 3 12-UW-2001;
Location/Qualifiers
                                                                                                                                                                   3.7%; Score 10.8; DB 1; Length 16; 85.7%; Pred. No. 6.6e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.7%; Score 10.8; DB 1; Length 16; 85.7%; Pred. No. 6.6e+02; rative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-MAR-1999 JP 1999084967
26-MAR-1998 BE 198131317:0
ELEQLICGANKU DIETOMALYA, JOSEPH RUSSHOFU
C12Q1/68, C12N15/09, C12N15/00
                                                                                                                                                                                                                                                                                                                 DNA
                                                                                                                  1. .16
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .16
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                             Sequence 3 from patent US 6245748. AR157691
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Artificial Sequence
JP 1999318498-A/5
24-NOV-1999
                                                                                                                                                                                                                                                                                                                                                    AR157691.1 GI:16218668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E39139.1 GI:13017701 JP 1999318498-A/5.
                                                                                                                                                                                                                       718 GAGAGTGACTCTGG 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         960 CAAATTGACTCTCT 973
                                                                                                                                                                                                                                               16 GACACTGACTCTGG 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14 CCAATAGACTCTCT 1
                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                      Query Match
Best Local Similarity
'``hes 12; Conserv?
                                    Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 12; Conserv
      Unknown.
                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                           Unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1202
AR157691/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1203
                                                                                                                                                                                                                                                                                                                            DEFINITION
                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                         TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                        ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E39139
LOCUS
             SOURCE
                                                                                                                                                                                                                                             qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dp
```

```
ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                linear PAT 02-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAT 07-0CT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unclassified.

1 (bases 1 to 16)

Vergnaud, G.

Process for detection of new polymorphic loci in a DNA sequence, nucleotide sequences forming hybridization probes and their applications

Patent: US 5556955-A 37 17-SEP-1996;

Location/Qualifiers
                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 16) Schoner, R.G. Schoner, B.E. and Schoner, R.G. Novel voctors and expression sequences for production of
                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0

    .16
    /organism='Artificial Sequence'

                                                                                                                                                                           Query Match 3.7%; Score 10.8; DB 1; Length 16; Best Local Similarity 85.7%; Pred. No. 6.6e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.7%; Score 10.8; DB 1; Length 16; 85.7%; Pred. No. 6.6e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.7%; Score 10.8; DB 1; Length 16; Best Local Similarity 85.7%; Pred. No. 6.6e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear

    .16
        /organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Polypeptides
Polypeptides
Patent: EP 0316115-A2 22 17-MAY-1989;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .16
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        126252 16 bp Sequence 37 from patent US 5556955.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 22 from Patent EP 0316115. 107129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                16 bp
                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
```

```
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unknown.
                                                                                                                                                                                                                                             Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                   source
                                                                                                                                                                      RESULT 1209
                                                                                                                                                                                                  DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1210
AR397598/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1211
TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                              TITLE
JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                     AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                 AR234403
                                                                                                                                                                                                                                             SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCUS
                                                                                                                    à
                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                      PAT 07-0CT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PAT 20-JUN-2002
                                                                 PAT 07-OCT-1997
                                                                                                                       Gaps
                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                           ..
0
                                                                                                                                                                                                                                                       Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.7%; Score 10.8; DB 1; Length 1 ilarity 85.7%; Pred. No. 6.6e+02; Conservative 0; Mismatches 2; Indels
                                                                  linear
                                                                                                                                                                                                                                                                          2; Indels
                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                  Unknown.
Unclassified.
1 (bases 1 to 16)
Stinchcomb,D.T., Draper,K.G. and McSwiggen,J.
Rel a targeted ribozymes
Patent: US 5689780-A 829 19-AUG-1997;
Location/Qualifiers
                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 85.7%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DNA
                                                                  DNA
                                                                                                                                                                                                                                                                                                                                                                  l6 bp Di
Sequence 829 from patent US 5658780.
162275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .16
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 bp
Sequence 5 from patent US 6365375.
AR203384.1 GI:21499759
                                                                149531
Sequence 5 from patent US 5641486.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unknown.
Unclassified.
1 (bases 1 to 16)
Dietmaier, W. and Ruschoff, J.
                                                                                                                                                                                                                                                                                               792 GGTGCCAAGAGCTC 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         773 TTCTGAGGGCAGCC 786
                                                                                                                                                                                                                                                                                                                                                                                                    I62275.1 GI:2480223
                                                                                    149531
149531.1 GI:2471751
                                                                                                                                                                                                                                                                                                                  2 GGGGTCAAGAGCTC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 Trergaaddegee 2
  || ||||||||||
16 AGTCCAGCCCCTCT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                        Unknown.
                                                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1208
AR203384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          source
                                            RESULT 1206
I49531
                                                                                                                                                                                                                                                                                                                                                  RESULT 1207
                                                                                                                   SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                         JOURNAL
FEATURES
                                                                                                                                                REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                   VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AUTHORS
                                                                                                          KEYWORDS
                                                                                                                                                                                                                                                                                                                                                            162275/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                              VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                 LOCUS
                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                 qq
               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

```
ö
                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                              PAT 20-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                          Score 10.8; DB 1; Length 16;
Pred. No. 6.6e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
3.7%; Score 10.8; DB 1; Length 16;
Best Local Similarity 85.7%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.7%; Score 10.8; DB 1; Length 16; 85.7%; Pred. No. 6.6e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
Unclassified.
1 (bases 1 to 16)
1 (bases 1. Welch, P.J., Tritz, R., Yei, S. and Yu, M. Hepatitis C Virus ribozymes
Patent: US 6458567-A 57 01-0CT-2002;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
Method of primer-extension preamplification PCR Patent: US 6365375-A 5 02-APR-2002; Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
Unclassified.

(bases 1 to 16)
Marraccini,P. and Rogers,J.
Coffee storage proteins
Patent: US 6617433-A 24 09-SEP-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16 bp 1
Sequence 24 from patent US 6617433.
AR397598
AR397598.1 GI:40134698
                                                      1. .16
/organism="unknown"
/mol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                            AR234403 16 bp I
Sequence 57 from patent US 6458567.
AR234403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1. .16
/organism="unknown"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .16
/organism="unknown"
/wol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                   AR234403.1 GI:27277091
                                                                                                                          Query Match 3.7%;
Best Local Similarity 85.7%;
Matches 12; Conservative
                                                                                                                                                                                                   763 AGGCCTCCACTTCT 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           753 CAGGGTCCCTAGGC 766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   718 GAGAGTGACTCTGG 731
                                                                                                                                                                                                                                     3 AGGCCTCCCTGCT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGGGTCCCCCGGC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14 GAGCGGGACTCTGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
```

```
/mol_type="unassigned DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 cáccerdantecas 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        unidentified
unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unclassified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1215
                                                                                                                                                              RESULT 1214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                      TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                             REFERENCE
AUTHORS
                                                                                                                                                                                                                ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AX322719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                           AX011282
                                                                                                                                                                                                                                           KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAT 10-MAR-2000
                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                           PAT 18-DEC-2003
                PAT 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
0
                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.7%; Score 10.8; DB 1; Length 16; 85.7%; Pred. No. 6.6e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                        Query Match
3.7%; Score 10.8; DB 1; Length 16;
Best Local Similarity 85.7%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 16)
Eckstein,F., Ludwig,J. and Beigelman,L.
Nucleic acid catalysts with endonuclease activity
Patent: US 6656731_A 54 02-DEC-2003;
                  linear
                                                                                                                       Theres I to 16)
Eckstein,F., Indwig,J. and Beigelman,L.
Nucleic acid catalysts with endonuclease activity
Patent: US 6656731-A 53 02-DEC-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 16)
Marraccini,P. and Rogers,J.
COFFEE STORAGE PROTEINS
PATCH: WO 9902688-A 24 21-JAN-1999;
NESTLE SA (CH); MARRACCINI PIERRE (FR)
                                                                                                                                                                                                                                                                                                                                                                                              RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .16
/organism="unknown"
/wol_type="unassigned RNA"
                                                                                                                                                                                                                 /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                                           AR435795 16 bp
Sequence 54 from patent US 6656731.
                  16 bp
Sequence 53 from patent US 6656731.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 24 from Patent WO9902688.
AX001014
AX001014.1 GI:7241253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                           1. .16
/organism="unknown"
                                                                                                                                                                                                                                                                                                                                                                                                                       AR435795
AR435795.1 GI:40198879
                                                         AR435794.1 GI:40198878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          920 CATCACCACCACC 933
                                                                                                                                                                                                                                                                                                 921 ATCACCACCAT 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14 CATCATCAACACCC 1
                                                                                                                                                                                                                                                                                                                          16 Arcarcaacaccr 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12; Conservative
                                                                                                            Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unidentified
unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AX001014
                                            AR435794
                                                                                   Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unknown.
                                                                                                  Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AX001014/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1213
                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                     RESULT 1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
    AR435794/c
LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                AR435795/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                               ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
                                                                                                                                                   TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AUTHORS
                                             ACCESSION
                                                                                                                          REFERENCE
                                                                                                                                         AUTHORS
                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                                                                               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PAT 07-JAN-2002
                                           ;
0
                                                                                                                                                                                                                      PAT 06-SEP-2000
                                                                                                                                                                                                                                                                                                                                           Homo sapiens
Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        Improved method for primer extension preamplification-por
Patent: BP 0957177-A5 17-NOV-1999;
ROCHE DIAGNOSTICS GMBH (DE)
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.7%; Score 10.8; DB 1; Length 16; Best Local Similarity 85.7%; Pred. No. 6.6e+02; Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 16;
Score 10.8; DB 1; Length 16;
Pred. No. 6.6e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Svendsen, A., Glad, S.O., Fukuyama, S. and Matsui, T. Cutinase variants
Patent: WO 0192502-A 4 06-DEC-2001;
Novozymes A/S (DK)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 10.8; DB 1;
Pred. No. 6.6e+02;
0; Mismatches 2;
                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="unassigned DNA"
/db_xref="taxon:32644"
/note="Dop2-R"

    .16
    /organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .16
/organism="unidentified"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 bp
Sequence 4 from Patent W00192502.
AX322719
AX322719.1 GI:18093709
                                                                                                                                                                                                                      AX011282
Sequence 5 from Patent EP0957177.
AX011282
AX011282.1 GI:9997833
                                                                                                                                                                                                                                                                                                                                                                                                                     Dietmaier, W.D. and Rueschoff, J.P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.7%;
85.7%;
  Query Match 3.7%;
Best Local Similarity 85.7%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   763 AGGCCTCCACTTCT 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         853 CGICCIGGCICCAG 866
                                                                                  718 GAGAGTGACTCTGG 731
                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3 AGGCCTCCCTGCT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 85.78
Matches 12; Conservative
                                                                                                                         14 GAGCGGGACTCTGG 1
```

rge.res

RNA

Sequence 3819 from Patent EP1260586. AX636680.1 GI:28472294

AX636680/c LOCUS

DEFINITION

ACCESSION VERSION

KEYWORDS

SOURCE

unidentified unclassified.

ORGANISM

REFERENCE AUTHORS

unidentified

Patent: EP 1260586-A 3819 27-NOV-2002; RIBOZYME PHARMACEUTICALS, INC. (US) Location/Qualifiers

JOURNAL

TITLE

FEATURES

/mol_type="unassigned RNA" /db_xref="taxon:32644" .16
 /organism="unidentified"

Query Match 3.7%; Best Local Similarity 85.7%; Matches 12; Conservative

773 TICTGAGGGCAGCC 786

ð g

15 rrcrahaddcadcc 2

3 TGGGGCAGCGCCT 16

```
IG bp DNA linear PAT 27-AUG-2002

ION Inhibition of FGF-binding protein by using ribozyme.

BD076480.1 G1:22622083

S JP 201517461-A/3.

S Synthetic construct

Synthetic construct

artificial sequences.

I (bases 1 to 16)

Wellstein, A. and Czubayko, F.

Inhibition of FGF-binding protein by using ribozyme

AL PERELL DP 2001517461-A/3

S Wellstein, A. and Czubayko, F.

Inhibition of FGF-binding protein by using ribozyme

AL PERELL DP 2001517461-A/3

OS Artificial Sequence

PR 26-SEP-1998 JP 2000512990

PR 26-SEP-1999 JP 2000512990

PR 26-SEP-1999 JV 2006512990

PR 26-SEP-1999 JV 36060170

PR 26-SEP-1999 JV 36060170

PR 26-SEP-1999 JV 36060170

PR 26-SEP-1999 JV 36060170

PR 26-SEP-1990 JP 2000512990

PR 26-SEP-1990 JV 36060170

PR 36-SEP-1990 JV 360
                                                                                         PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                              E 1 (bases 1 to 16)
Schlingensiepen,K.H. and Brysch,W.
An antisense oligonucleotide preparation method
In antisense oligonucleotide preparation method
Batch 2001511000-A 338 07-AUG-2001;
BIOGNOSTIK GESELLSCHAFT FUR BIOMOLEKULARE DIAGNOSTIK MBH
OS Unknown
PN 07-2001511000-A/338
PD 07-AUG-2001
PF 30-JAN-1998 UP 1998532533
PR 31-JAN-1997 EP 97101531.8
PI KARL HERMANN SCHLINGENEEPEN, WOLFGANG BRYSCH
PC C12X15/11, COTAZ1/04, A61KZ1/70
CC An antisense oligonucleotide preparation method FH Ke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JP 2001511000-A/338
07-AUG-2001
31-QAN-1999 pt 1998532533
31-JAN-1997 EP 97101531.8
KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
C12N15/11, C07H21/04, AG1K31/70
An antisense oligomucleotide preparation method FH
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.7%; Score 10.8; DB 1; Length 1
35.7%; Pred. No. 6.6e+02;
ive 0; Mismatches 2; Indels
                                                                       16 bp DNA line:
An antisense oligonucleotide preparation method
BD065703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism='Unknown'
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1. .16
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1. .16
                                                                                                                                                                       BD065703.1 GI:22611306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ilarity 85.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      790 CTGGTGCCAAGAGC 803
                                                                                                                                                                                                  JP 2001511000-A/338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 CTGCTGCCATGAGC 3
                                                                                                                                                                                                                                                                                            unclassified.
                                                                                                                                                                                                                                unidentified
                                                                                                                                                                                                                                                              unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                RESULT 1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1219
BD076480/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                           BD065703/c
                                                                                                              DEFINITION
                                                                                                                                                                                                                                SOURCE
ORGANISM
                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE
AUTHORS
                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                              Woolf,T.
Method and reagent for inhibiting the expression of disease related
PAT 21-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                               Stinchcomb, D.T., Dudycz, L.W., Chowrira, B., Grimm, S., Direnzo, A., Karpeisky, A., Draper, K.G., Kisich, K., Matulic-Adamic, J., Mcswiggen, J.A., Modak, A., Pavco, P., Beigelman, L., Sullivan, S.M., Sweedler, D., Thompson, J.D., Tracz, D., Usman, N., Wincott, F.E. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Кеу
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Schlingensiepen, K.H. and Brysch, W.
Schlingensiepen, K.H. and Brysch, W.
An antisense Olgomucleotide preparation method
Patent: JP 2001511000-A 153 07-AUG-2001;
BIOGNOSTIK GESELLSCHART FUR BIOMOLEKULARE DIAGNOSTIK MBH
OS Unknown
PN JP 2001511000-A/153
PP 30-JAN-1998 JP 1998532533
PR 31-JAN-1997 EP 97101531.8
PI KARL HERMANN SCHLINGENSIEPEN, WOLFGANG BRYSCH
PC CL2XN5/11, CO7H21/104, A61K31/70
CC An antisense oligonucleotide preparation method FH Ke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.7%; Score 10.8; DB 1; Length 16; 85.7%; Pred. No. 6.6e+02; tive 0; Mismatches 2; Indels
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BD065518 11 bp DNA linear An antisense oligonucleotide preparation method.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 10.8; DB 1;
Pred. No. 6.6e+02;
0; Mismatches 2;
```

BD065518 BD065518.1 GI:22611121

ACCESSION VERSION KEYWORDS

BD065518

RESULT 1217 BD065518 LOCUS DEFINITION JP 2001511000-A/153

unidentified

SOURCE ORGANISM

AUTHORS TITLE JOURNAL

COMMENT

REFERENCE

unidentified unclassified.

·,

Conservative

Query Match Best Local Similarity Matches 12; Conserv

/organism='Unknown' Location/Qualifiers

source

source

FEATURES

1. .16 /organism="unidentified" /mol_type="genomic DNA" /db_xref="taxon:32644"

```
Patent: JP 2001321190-A 347 20-NOV-2001;
THE INSTITUTE OF PHYSICAL AND CHEMICAL RESEARCH, YUGENKAISHA
                                                                                                                                                                                                                                                                                   3.7%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      886 TGCACTTACTTCTC 899
                                                                                                                                                                                                                                                                                                                                       730 GGTCATAGGACTTG 743
                                                                                                                                                                                                                                                                                                                                                               1 GGACATGGGACTTG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12; Conservative
                                                                                                                                                                                                                                                                                                              12; Conservative
                                                                                                                                      C12N15/00
                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                              source
                                                                                                                         C12N15/00
                              GENOTECHS
OS Artif
PN JP 20
PD 20-NO
PF 12-MA
PI EIICH
PC C12N1
                                                                                                                                      25
                                                                                                                                                                             FT
                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1222
BD104577/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
      JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                    PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                            Unidentified
JP 2001509386-A/23
25-JUL-2001
25-JUN-1998 JP 2000502184
12-JUL-1997 BP 9720183.6
PIERRE MARRACCINI, JOHN ROGERS
CI2NIS/09, A01HS/00, A61K7/00, A61K38/00, C07K14/415, C12N5/10, PC
                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                  ·.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 10.8; DB 1; Length 16;
Pred. No. 6.6e+02;
                                                                                   Query Match

3.7%; Score 10.8; DB 1; Length 16;
Best Local Similarity 85.7%; Pred. No. 6.6e+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism='Unidentified'
                                                                                                                                                                                                                                                                           BD081767.1 GI:22627370
JP 2001509386-A/23.
unidentified
unclassified.1
l (bases 1 to 16)
Marraccini, P. and Rogers, J.
Storage protein of coffee
Patent: JP 2001509386-A 23 24-JUL-2001;
SOCIETE DES PRODUITS NESTLE SA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers

    16 / Organism="synthetic construct"
/organism="genomic DNA"
/db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BD088103 16 bp D.
BD088103 BD088103
BD088103 BD088103
BD088103 GI:22633713
JP 2001321190-A/347.
Synthetic construct
artificial sequences.
I (bases 1 to 16)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.7%; Score 10.8; D
Best Local Similarity 85.7%; Pred. No. 6.6e
Matches 12; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A method of arraying genome clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CIN15/00,A61K37/02,C12N5/00
Strandedness: Single;
Topology: Linear;
/desc = 'OLIGONUCLEOTIDE'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .16
/organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                                                                                                                                                                                                                        16 bp
            Location/Qualifiers
                                                                                                                                                                                                                                                  Storage protein of coffee. BD081767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 718 GAGAGTGACTCTGG 731
                                                                                                                                             960 CAAATTGACTCTCT 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14 GAGCGGGACTCTGG 1
                                                                                                                                                                       ccaaragacrerer 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C1201/68,
C1201/68,
PC C12NJ
CC C12NJ
CC TOT
CC TOT
FH F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Soeda, E
                                                                                                                                                                                                                                          BD081767
                                                                                                                                                                                                                                                                                                                                                                                                                 OS
PN
PD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1221
                                                                                                                                                                                                                                                                  ACCESSION
VERSION
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                 RESULT 1220
BD081767/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
TITLE
                              source
                                                                                                                                                                                                                                          LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
SOURCE
                                                                                                                                                                                                                                                                                                                                                             AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BD088103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VERSION
               FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
```

```
Kit and method for determining HLA type
Patent: WO 0192572-A 681 06-DEC-2001;
NISSHINBO INDUSTRIES INC, SYSTEM RESEARCH INC, HIDETOSHI INOKO, TAEKO
KAGIYA, TATSUO ICHIHARA, YOSHIYUKI MATSUMURA, SHOGO MORIYA, MICHIO
NISHIDA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
Artificial Sequence
JP 2001321190-A/347
20-NOV-2001
20-NOV-2001
EIICHI SOEDA
C12N15/09,C12N15/09,C12N1/00,C12Q1/68,G01N33/53,G01N33/566, PC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PAT 27-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oxariania Sequence
Natificial Sequence
Natificial Sequence
Natificial Sequence
Natificial Sequence
National National Sequence
National Sequence
National Sequence Sequence
National Sequence Sequence
National Sequence Sequence
National Sequence Sequence Sequence
National Sequence Seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ы
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   synthetic construct
synthetic construct
artificial sequences.
1 (bases 1 to 16)
Inoko,H., Kagiya,T., Ichihara,T., Matsumura,Y., Moriya,S. and
Mishida,M.
                                                                                                                                                                                                                                                                                                                                               Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
                                                                                                                                                                                                                                                                                                                                               EH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                             Description of Artificial Sequence:Synthetic DNA Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.7%; Score 10.8; DB 1; Length 16; 85.7%; Pred. No. 6.6e+02; iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /organism='Artificial Sequence' Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                              1. .16
/organism='Artificial Sequence'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 10.8; DB 1; Length 1 Pred. No. 6.6e+02; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 bp DNA
Kit and method for determining HLA type.
BD104577
BD104577.1 GI:22650151
SWATTAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1..16
/organism="synthetic construct"
/mol type="genomic DNA"
/db_xref="taxon:32630"

    16 / organism="synthetic construct"
/mol_type="genomic DNA"
/db_xref="taxon:32630"

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
```

TGCACGTACTCCTC

g

```
Search completed: July 12, 2004, 10:22:37 Job time : 9 secs
711 GTCCCAGGAGAGTG 724
                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                 AR324976/c
                                                                                                                                     DEFINITION
                                                                                                                                                                                                        SOURCE
ORGANISM
                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                           AUTHORS
TITLE
                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                 FEATURES
                                                                                                                     LOCUS
à
                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
                                                  ABU67830 16 bp DNA linear SYN 21-MAY-2003 Synthetic construct DNA, forward primer for human STS sts-stSG3242 at 1p36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PAT 20-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                            Chen,Y.Z., Hayashi,Y., Wu,J.G., Takaoka,E., Maekawa,K.,
Watanabe,N., Inazawa,J., Hosoda,F., Arai,Y., Mizushima,H.,
Morohashi,A., Ohira,M., Nakagawara,A., Liu,S., Hoshi,M., Horii,A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="forward primer for human STS sts-stSG3242 at 1p36 sts-stSG3242 obtained from clones B326A10, B361M21and B118K9, B118D12, Human BAC library RPCI-11"
                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (04-AUG-2001) Akira Horii, Tohoku University School of Medicine, Molecular Pathology; 2-1 Seiryomachi, Aoba-ku, Sendai, Miyagi 980-8575, Japan (E-mail:horii@mail.cc.tohoku.ac.jp, Tel:81-22-717-8042, Rax:81-22-717-8047)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 17)
Pavco.P., McSwiggen, J., Stinchcomb, D. and Escobedo, J.
Method and reagent for the treatment of diseases or conditions related to levels of vascular endothelial growth factor receptor Patent: US 6346399-A 5487 12-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                  A BAC-based STS-content map spanning a 35-Mb region of human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
3.7%; Score 10.8; DB 1; Length 16;
Best Local Similarity 85.7%; Pred. No. 6.66+02;
Matches 12; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.7%; Score 10.8; DB 1; Length 17; 85.7%; Pred. No. 7e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /organism="synthetic construct"
/mol_type="genomic DNA"
_d_xref="taxon:32630"
__.16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AR189999 17 bp DNA Sequence 5487 from patent US 6346398. AR189999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="unknown"
/wol_type="unassigned DNA"
                                                                                                                                                                                                                                                                                                                 chromosome 1p35-p36
Genomics 74 (1), 55-70 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                        AB067830.
AB067830.1 GI:15128634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AR189999.1 GI:20235964
                                                                                                                                                                             synthetic construct
artificial sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     730 GGTCATAGGACTTG 743
                                                                                                                                                           synthetic construct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 GGACATGGGACTTG 14
                                                                                                                                                                                                                                                                                                                                                                                       (bases 1 to 16)
                                                                                                                                                                                                                                                                                                                                                                                                     Horii, A.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 85.73
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unknown.
Unclassified.
                                                                                                                                                                                                                                                                              and Soeda, E
                                                         AB067830
                                                                                                                                                                                                                                                                                                                                                     21269192
                                                                                                                                                                                                                                                                                                                                                                        11374902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unknown.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 misc_feature
                RESULT 1223
                                                      LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1224
AR189999/c
                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                   PUBMED
REFERENCE
                                                                                                                       VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                     MEDLINE
                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                     AB067830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
```

```
PAT 17-AUG-2003
                                                                                                                                                                                                                                                   1 (bases 1 to 17)
Pavco,P., McSwiggen,J.A., Stinchcomb,D.T. and Escobedo,J.
Method and reagent for the treatment of diseases or conditions
related to levels of vascular endothelial growth factor receptor
Patent: US 6566127-A 2378 20-MAY-2003;
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 10.8; DB 1; Length 17; Pred. No. 7e+02; 2; Indels 0; Mismatches 2; Indels
                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
                                                                                                   Sequence 2378 from patent US 6566127. AR324976
                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="unassigned RNA"
                                                                                                                                                                                                                                                                                                                                                                        1. .17
/organism="unknown"
                                                                                                                                                           AR324976.1 GI:33710784
                                                                                                                                                                                                                                                                                                                                                                                                                                            3.7%;
85.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  711 GTCCCAGGAGAGTG 724
17 GTCCCAGGAAAGGG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 GTCCCAGGAAAGGG
                                                                                                                                                                                                                  Unknown.
Unclassified.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 12; Conserva
                                                                                                                                                                                                  Unknown.
```

ö

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

using sw model - nucleic search, nucleic

ωO

July 12, 2004, 10:27:15; Search time 5 Seconds (without alignments) 2.964 Million cell updates/sec Run on:

1 tccagcgagtcccaggagagg.....taaatctggtgtatgggtat 290 us-10-016-149-3 290 Title: Perfect score: Sequence:

Scoring table:

IDENTITY NUC Gapop 10.0 , Gapext 0.5

1460 seqs, 25555 residues

Searched:

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 8 Maximum DB seq length: 50

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 1475 summaries

rngdb:* Database:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		Human SNP olioon	chrc			Human PLA2 antisen	Human PLA2 antisen	PLA2	PLA2	Human PLA2 antisen	Human PLA2 antisen	Human PLA2 antisen	Human PLA2 antisen	PLA2	Human PLA2 antisen	PLA2	Human PLA2 antisen	PLA2	Human PLA2 antisen	Human microarray D	Human microarray D	Dirofilaria immîti	Ankyrin cDNA relat	Human microarray D										
SUMMARIES	ID	13	ABL43300	ABL43299	ACC82862	ACC82861	ACC82849	ACC82866	ACC82869	ACC82852	ACC82865	ACC82847	ACC82858	ACC82860	ACC82848	ACC82867	ACC82855	ACC82857	ACC82868	ACC82851	ACC82853	ACC82864	ACC82859	ACC82863	ACC82850	ACC82854	ACC82856	ACC82844	ACC82846	ACI83926	ACI24821		AAL37969	ACK10597
	DB	-	Н	Н	٦	Н	Н	Н	П	г	Н	Н	П	н	-	٦	Н	Н	-	н	П	г	Н	Н	Н	Н	Н	Н	Н	Н	Н	7	Н	П
	Length	50	24	20	20		20	20	20	20	20	20	20	20	20	20						20										24	24	25
40	Query	17.2	8.3	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	6.9	9.9	9.9			5.9		
	Score	50	24	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	19	19	7	7	17.2	7	17
	ult No.	Н	C)	m	4	Ŋ	9	7	œ	σ	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	52	56	27	28	29	30	31	32	33
	Result No.	υ	υ			υ																							υ			υ	υ	

nucleoti microar binant the microar e DGAT Fe e DGAT Fe ndotheli ter prob squalen poppy re olige re olige re albic	Human POSHL1 scann Mass spectrometric Human biallelic ma PCR primer used to Human chromosome 1 Capture oligonucle Human DNA MeTase D DNMT3a oligonucleo Human DNA MeTase D Chromosome 11 (loc Oligonucleotide pr	CAT INPP1 downstre Human c-fos siNA 1 Human c-fos transc Human CCR3 oligonu Dechlorination bac Human SUORF36 rece SNORF36 receptor i Metal capturing pr Mouse INF-alpha ha Human XIIS gene fr	PCR primer for Str PCR primer IRN-gam Human Her-1 antise Forward PCR primer Human chromosome 1 Human oligonucleot dnaform60441 PCR p Dendritic cell bet Anti-HIV TAR regio Blunt ended oligo Sticky ended oligo Sticky ended oligo Blunt ended oligo Blunt ended oligo Blunt ended oligo Human bisplaire ma Human DSP-3 RACE P	Human DSP-3 cDNA R Human DSP-3 cDNA am Human PTTG2 DNA am Human PTTG2 gene am PTTG related PCR p Human PTTG2 PCR pr Human SECX 2777610 Human SECX associa Single nucleotide Human POSHL1 scann Human DSSHL1 scann Human piallelic po Human piallelic po Human piallelic po	uman yene uman POLYI uman POLYI uman PCR I uman endoc CR primer CR primer CR primer
AAA58827 ACI23633 ABZ21820 ACI71755 ABZ76989 ABZ76989 AAX27650 AAX2376 AAV20756 AAV20756 AAV20756 AAV20756 AAV20756 AAV20758					
напанапапапапа.	нанананана.	нененнана	алананананана	488888888888	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1	20000000000000000000000000000000000000	,	211 221 221 222 117 117 117 118	500000000000000000000000000000000000000
	4.4.4.4.0.0000000000000000000000000000	15. 15. 15. 15. 15. 15. 15. 16. 18.	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
	4 G G G G G G G G G G G G G G G G G G G	665 665 665 666 666 666 666 666 666 666	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000 000 000 000 000 000 000
ט טטט ט	υυυ	ט ט ט	זמ ט ט ט		
		•			

Human genomic SNP Human Chkl ribozym Human POSHL1 scann Human POSHL1 scann	Tumour suppression Primer P53-3X5SEQ	Caenorhabditis ele TRAF3 antisense ol	random b	PCR primer used to	PCR primer used to Human biallelic ma	Clone vq11_1 secre	Human Ig L chain s Himan R7-1 antisen	Human DDB2 antisen	Human chromosome 1	Human Inhibitor of	Human oligonucleot	Human oligonucleot	Multiplex group PC DNMT3a oligonucleo	Human DNA MeTase D	Human DNA MeTase D	Human B/-1 targete Human PTRN nhospho	Human biallelic ma	Human PTEN antisen	B7-related protein	Human light chain	ated PCR p	Filament forming b	5X2	OVCAl gene exon 3	Primer for exon 2 Primer for exon 2	PCR primer used to	Blocking oligonucl	Human obesity-asso	PCR primer RW01, f	Universal bacteria	Mouse genomic DNA	Primer #4 for cyto	Frimer #2 for cyto Zea mays denome re	Human PRCC-TFE3 co	Cytochrome b-5 red	Alpha-v beta-3 MAb	PCR primer used to	Himan chioredoxin Himan allele PCR p	PCR primer used to	Human TNFalpha ant	Human biallelic ma Human biallelic ma	Human biallelic ma	Primer 2 for human	, - <u>i</u>	ense ol	recept	daxx	PARP	Universal PCR prim Microorganism dete	
1 AAA36427 1 AAH95808 1 ABV90405 1 ABV90401			AAZ9543		AAZ0591								1 ABT21439 1 ABT33855														1 AAV73500								1 AAV52776								AAA0993	1 AAC73740	AAA5419		AAF3314 AAF7292	AAS4566	ABA769 AAH031	
117 117 117	17	18 18	18	20	200	707	9 0	0 0	50	0 7 6	200	20	200	20	20	70	9 6	18	18	9 6	18	18	6 H	19	61.	13	19	13	20	50	0 0	20	200	202	20	700	20	0.00	200	20	200	20	20	70	50	20	9 O 7 V	20	7 7 7 8	
4 4 4 4 6 0 0 0 0	4.4 6.6	4.6 6.6	4.6	4. 4. 0. 6.	9.4	4.6	4.4	4. 4. 0. 0.	4.6	4. 4 6. 4	* 4 5 0	4.6	4 4	. 4.	4.6	4. 6	4	4.6	9.4	4. 4 6. 6	4.6	9.4	4. 4 6. 6.	4.6	9.4	. 4	9.4	0.4	4.6	9.4	4 4 6 9	4.6	4. 4 6. 4	4.6	9.4	4. 4.	4.6	9.4	4. 4. 6. 6.	4.6	4. 6 9. 4	. 4	4.6	4. 4 0. 6	4.6	9.4	4.4 0.4	4.6	4.6	
4. 4. 4. 4. 4.	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.4	13.5	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2	13.2 13.2	
c 180 c 181 182 183	ထေ	18	18	∞ or	9	C 193	9 0	196	7.9	-	C 199		c 202 203	204	205	206	200	209	c 210		C 213	214	215	217	218	220	0 221		c 224			c 228			G 232		235	236	C 238		c 240		c 243		246	C 247	24.2 24.0		c 251 c 252	
Clone vc65_1 secre Human cDNA clone-s PCR primer used fo Nucleotide sequenc	Human oligonucleot Tumour necrosis fa	PCR primer, 3m4, f Chicken HMGI-c mic	Mouse neurofibroma	PCR primer for Tum Primer LR3 used in	an gene	אַ פַּ	cell deat	Alphal integrin pr Cysteine noose lib	T G	Human NOGO Hammerh	Human NOGO Inozyme Human NOGO Inozyme	Ä	E 6	pck primer PA3 use	Plasmid pTrc99A pr	Human PKC-alpha sh	Chromosome 11 (100	Human B7-1 targett	Human leukocyte an	Human B7-1 mRNA an	Human HLA Class I	Human API4 antisen	Human DDB2 antisen	Human CCR3 oligonu	Antisense oligonuc	Kat Gjøl related m Human TIMP-2 forwa	Human B7-1 mRNA ta	DNA iragment encod	5 5	at Gjb1	⊸ "	ntisens	a, -	Antisense oligonuc	7.1	ë t	isense	Hepatitis B virus	Hepatitis B Virus Forward PCR primer	Human VCAM-1 antis	Human PEPCK-cytoso	Bacilius sp alkali Capture oligonucle	Human oligonucleot	Human oligonucleot	Human G protein-co	Human phospholipas	Neuroblastoma-rela Neuroblastoma-rela	16 PCR prime	VCAM-	
20 1 AAA93137 20 1 AAK95036 20 1 AAF62076 20 1 ABL59021		н н	н		н,		₽.		۲.	н,		-	Н.			Н,		٦,	Н	Н,	- -	Н		4 ~	н,			٦,		7	Н.		н,	- r-	н.		4 ~	Н,	- H	Η Η	н,		7			Н,	٦ ,	H	חח	
فففف	م ہ	ە. م	. 6.	o, o,	0.0	თ. თ.	8	æ. α		ω.	ω α		80.0	D 00		80.	ao c			۵.	œ.	. 8.	۰. ۰	ο œ.	. 80.	oc.α		တ ့	0.00.	. 80	۰ س ۱		.,			۲.		.7			۲.		.7	۲.		.7	۲.			
4 4 4 4 2 2	2.4	কক	4.2	4. 4. G G	4.2	4 4	14		14	8.0	ص مر م		8.0	0 00) OF	8	8.6	3.8	3.8 4	3.8	3.8	3.8 4	8.0	, m	8.			œ٠ د د	0.00	3.8	8.6	9.0	9.6	9.6	3.6	9.0	9.9	3.6	9.0	9.0	9.6	9.0	3.6	9.6	o .0.	3.6	3.6	0 V9	13.6	·
107 1 c 108 1 109 1		113	115		118		121	c 122	124					130											145		148	149		152		155				160	162		164 165		167		170		173				178	

ന

Human POSHLI scann Human PoshLi scann Human tumour endot HCV minus strand D Murine oligonucleo Tumour suppression Powlpox virus Orfi Polyhistidine codi PCM primer for hum Oligonucleotide pr Human Dallelic ma Human G-alpha-i3 a Human CACP (MSF) g Metal capturing pr Human G-alpha-i3 a Human CACP (MSF) g Metal capturing pr Human CACP (MSF) g Metal capturing pr Human CACP (MSF) g Metal capturing pr Human CYP7Al fragm 6xHis-tag linker o DNA sequence encod Anorexia / life-st Primer 4 to amplif Probe JH3 for HWr-lacz-specific prim Fry Primer 4 to amplif Probe JH3 for HWr-lacz-specific prim Pry Primer 4 to amplif Probe JH3 for HWr-lacz-specific prim Primer 4 to amplif Probe JH3 for HWr-lacz-specific prim Primer 4 to amplif Probe JH3 for HWr-lacz-specific prim Primer 4 to amplif Probe JH3 for Human Chromosome 1 Ribozyme Human ABCA6 specif Human Diallelic po Primer Joycle depende Cyclin H ribozyme PCR primer DHAD DNA Reverse primer DHAD CGM3 ribozyme PCR primer DNA Reverse primer DHAD CGM3 ribozyme PCR primer Loycle depende Cyclin H ribozyme PCR primer DNA Represen Arabidopsis deoxyh Human CHMRI allele Nuoles ENT-a hammer Peptide mucleic ac Human CHMRI allele Nuolestile sequenc BJ linked triplex Human biallelic po	Human TIB-2 substr Rat ICAM hammerhea Rat ICAM hammerhea Rat ICAM hammerhea Interleukin-15 gen Interleukin-15 gen Integrin subunit b Integrin subunit b Human C-raf target Human C-raf target
ABV90003 ABV90003 ABV90002 ABV90002 ABV90002 ACC65606 ACC65606 ACC65606 AAXBA266 AAX13801 AAX213801 AAX213801 AAX2652 AAX12970 AAX209237 AAX20925 AAX20927 AAX20927 AAX20927 AAX20927 AAX3145 AAX3	AAA18464 AAT53528 AAT53691 AAT53446 AAV37791 AAA22642 AAA22643 AAAV1267
	177 177 177 177 177 177 177 177 177 177
ַ שְׁ שְׁ שִׁ שִׁ שִׁ שִׁ שִׁ שִׁ שִׁ שִׁ שִׁ שִ	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
11122222222222222222222222222222222222	7777 7777 7777 7777 7777 7777 7777 7777 7777
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Human genetic mark Gene 216 SSCP sequ Gene 216 SSCP sequ Gene 216 SSCP sequ Human chromosome 2 Human iAZTB PCR pr Human light chain Rattus norvegicus Human oligonucleot Human oligonucleot Human oligonucleot Human oligonucleot Human oligonucleot Human novy forward PCR primer, M. us Human MOVX forward PCR primer, #1, us Human GENT S speci Human GENT S speci Human GENT S speci Human acyl coenzym Micoorganism seque Rod opsin hairpin Human acyl coenzym Micoorganism seque Rod opsin hairpin Rubbit CETP HH riglyc HUMD1181 antisense Human bylleleic po Potato citrate syn Potato citrate syn Potato citrate syn Potato citrate syn Cysteine noose lib Human biallelic po Potato citrate syn Potato citrate syn Cysteine noose lib Human biallelic po Potato citrate syn Potato citrate syn Cysteine noose lib Human biallelic po Potato citrate syn Potato citrate syn Cysteine noose lib Human biallelic po Potato citrate syn Potato citrate syn Cysteine noose lib Human biallelic po Potato citrate syn Pumen palple glucocere Ruman FADD primer Human ribe glucocere EP-916734 primer N Reverse primer #10 Telomerase reverse Capture oligonucle Human oligonucle Human TIE-2 substr Human TIE-2 substr Human Craf target Oestrogen receptor Single nucleotide	uman GDML GDML GDML HTPL HTPL HTPL ERG
20 1 AAF89453 20 1 ABZ72187 20 1 AABZ91957 20 1 AABZ991957 20 1 AABZ99150 20 1 AABZ991957 20 1 ABZ991957 20 1 ABZ991968 20 1 ABZ99199 20 1 ABZ99199 20 1 AAZ99914 20 1 AAZ99914 20 1 AAZ99914 20 1 AAZ99199 21 AAZ99199 21 AAZ99199 22 1 AAZ99199 23 AAZ99199 24 AAZ99199 25 AAZ99199 26 AAZ99199 27 AAZ99199 28 AAZ99199 29 AAZ99199 20 AAZ9919	
	यं यं यं यं यं यं यं यं
	122.8 122.8 122.8 122.8 122.8
00 00 00 00 00 00 00 00 00 00 00 00 00	317 318 320 322 322 324 324

þ	Q	
٥	U	
١	4	
	•	
ţ	וכ	
١	4	
Ì	4	

Human GDMLP-1 17-m Human GDMLP-1 17-m Human GDMLP-1 17-m Human GDMLP-1 17-m	GDMLP-1 17	GDMLP-1 1	GDMLP-1 17	GDMLP-1 17	4 ~	GDMLP-1 17		port	HTPL scanni	HTPL SC	Human NEDD-1 scann Human DAPD-Fa asso	PAPP-E		POSHL1	Human POSHL1 Scann	POSHL1	POSHL1	Human POSHL1 scann	HIA gen	HLA	related	Human tumour suppr Human tumour suppr	Necrosis factor ka	NFKB sub-unit modu	NFKB sub-unit modu Human MDZ3 scannin	Human MDZ3 scannin	Human HER2 DNAzyme	Human HEKZ DNAZYWE HBW hammerhead rib	amberzyme s	DNAzyme subst	HCV minus strand D HBV incryme substr	minus s	HCV minus strand D	Murine oligonucleo	Murine oligonucleo	Human breast cance	Tumour suppression	suppres	Tumour suppression	AMLP1a s	Human AMLP1a scann	Tumour suppression	TMF 1521-1538 prob	Primer CDRFOR. SY	Primer for amplify Triple helix formi	Purification tag o	Zcytor7 cytokine r	TLA-7	Rhoc phosph	SIK-	statin pr	Human G-alpha-13 a	
1 ABN01621 1 ABN08916 1 ABN00669	ABN07398 ABN06056	ABN07401	ABN06109 ABN07399	ABN00670	ABN00234	ABN07674	ABQ63784	ABQ63333	ABV79209	ABV80323	ABN97629	ABS/4900	ABV91212	ABV90001	ABV90004	ABV90314 ABV90399	ABV91175	ABV89332	ABV91174	ABL31114	ADE53098	ACC52342	ACC51/04 ACA08293	ACA06441	ACA06737	ADA99514	ABZ65331	ABZ64958	ACD55354	ACD60052	L ACD63384	ACD52626	L ACD63400	1 ACC68697	1 ACC66568	1 ADA61967	1 ADA50323	1 ADB40319	1 ADB40584	1 ADC37896	1 ADC37895	1 ADB45341	1 ADE31019 1 AAO49399	1 AAQ42925	1 AAQ70161	1 AAT71737	1 AAV57517	1 AAV46236	1 AAV16/99 1 AAZ41001		1 AAV99371 1 AAX19393		
17 11 17 17 17 17 17 17 17 17 17 17 17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17.	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17 1	17	17	17	17 1	17	17	17 1	17	17	17	77	17	1,	17	17	17	17	17	17	17	17) H	1 1 1	18	1 1 1	18	18	18	18	18	18	
444	4. 4 2. c	2.2	4.4	. 2.	2.5	4 4	4.2	2.5	4. 4	4. 4.	4.2	4.2	4 4	4.2	2.5	4.4	. 2	4.2	2.5	4.4	4.2	4.2	4, 4	2. 4.	2.0	4 4	4.2.	4.2	4.4	4.5	4.2	4. 4	4.2	4.2	4 4	4.2	4.6	4. 4.	4.2	4.4	4.2	4.2	4. 4 2. 0	. 4	4.2	4.4	. 4	4.2	4, 4	4.2	2.4	* 4 7	
12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	12.2	
472 473 474	C 475	יים.	4.	C 479	4.	0 482 482 583	. 4.	4.	C 486		C 489	490	491 492	-	494	C 495	497	c 498	499	00 g	C 502		0 504		c 507		510			5 514		516	518	c 519		522	c 523	525 525	526	527 527	523		c 531		c 534	535	537	538	C 539	541	542	c 544	
Human genomic SNP Oestrogen receptor Oestrogen receptor	diu	Human Chki ribozym Human Chki ribozym	충	Human Chkl ribozym	POSHI	ж	Tumour suppression	ub-du	in-qns	ផ្ទ	g d		our su		ե 02	Human Akt-3 antise	sense p	ERRC1 dene exon 4	Human obesity-asso	Human chromosome 1	Human SNCG Bequenc Chromosome 11 (106	378	(PTC	in epoxic	HCV coding region-	coding	ing For	Human c-fos transc	en acti	Mitogen activated	Mitogen activated	hammerhe	Probe #5 targets D Human flt1 VEGF re	-1 VEGF		υ Ψ	Probe for BRCA1 (o	Human IL-2 recepto Integrin alpha 6 s	Wild type BRCA1 ex	Hammerhead ribozym	Hammernead IIDOZym	Nucleotide sequenc	Human Chkl ribozym	Human NOGO Amberzy	Human NOGO Amberzy	Human NOGO Hammerh	Rice OSEP3A gene I	1 (2)	GDMLP-1		GDMLP-1	Human GDMLP-1 17-m Human GDMLP-1 17-m	
17 1 AAA35998 17 1 AAA25681 17 1 AAA25682	- -	4.		н,		-	- -			н			н,	н,	٠.		Н		4 -	Н	Н,	٦,	-	Η,		1 -	, - 1 ,	H **	1 11	Η,		-	Н,	-1 m	г —	-1 -		Н.		Н	Н,	٦,		Н,		-	Н,						•
.3 17									. ~	~	~ ~			.	n r	· ~	~		n m		m (m (*	. m	е.	mm	. n	en (me	n m	m	m m	. ~	210	N 6	10	010	4 (7	2.0	N C	1 73	(7)	01 0	y (7	7	0,0	. ~!	7.	0 C	10	ci c	7 77	2,0	۹.
4 4 4	1 T	4.	1 4	4	বা ব	4	4.	1 4	. 4	4.	4. 4	1. 4.	4.	4.	•	•	•	•		•	•			-																													
2 399 12.4 400 12.4	40T	403 1	717	406			410	411	413		415		418		420		423	424	425		428	429		432				437			441		444			448		451		454		456	45/ 458	459		462	463			467		470	

Human KDR VEGF rec Integrin alpha 6 s Integrin alpha 6 s Integrin alpha 6 s Forward primer #3 Human Benomic SNP Human NOGO Inozyme Human NOGO Zinzyme BRCA1 mutation cor Male-sterile plant Male-sterile plant Male-sterile plant Tumour suppression Fres sub-unit modu NFKB sub-unit modu Human NOV2 CG14076 c-jun antisense ol Human NOV2 CG14076 c-jun antisense ol Human ICAM hammerh Rho B antisense ol Human ICAM hammerh Human ICAM hammerh Mouse B7-2 hammerh Mouse B7-3 hamm	Optinentin promote Oligonucleotide SE Fungus-derived 185 Capture probe 14. Human mACHR-6 cDNA Human flh8495 3' u Rat mACHR-6 antise Human leukocyte an Rat sodium channel Scdium channel ber Human DBD-Flag fus Human muscarinic a Human flt1 VEGF re Human flt1 VEGF re Human flt1 VEGF re Mouse flk-1 VEGF re M
17 1 AAX71614 17 1 AAX71615 17 1 AAA20426 17 1 AAA20427 17 1 AAA29121 17 1 AAA39121 17 1 AAA39121 17 1 ABA79130 17 1 ABA78039 17 1 ABA78030 17 1 ABA780460 17 1 ABA78040 18 1 AAA22406 18 1 AAA22406 19 1 AAA22400 19 1 AAA22406 19 1 AAA22406 19 1 AAA22407 19 1 AAA224000 19 1 AAA2240000 19 1 AAA224000000000000000000000000000000000	
	' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	673 674 674 675 111 678 678 111 689 111 684 111 684 111 687 111 688 111 689 110 110 110 110 110 110 110 110 110 11
HILA-A specific exo ELK-1 expression m Hexa(his) oligonuc Hexa(his) oligonuc Hexa(his) oligonuc WH3 DP-32 primer 2 Human cDNA library Human biallelic ma Human biallelic ma Human biallelic ma Human biallelic ma Antisense oligonuc Human pRO1480 reve Primer #76 used in Human TSR1, sequen Human TSR1, sequen Rho C antisense ph Drosophila ubx gen Pseudomonas specie NWA oligonucleotid Human erythropoiet Human secreted/tra Human ribozyme tar Triple helix third Oligonucleotide pr Human ribozyme tar Triple helix formi Oligonucleotide SE Oligonucleotide SE Oligonucleotide SE Oligonucleotide SE Oligonucleotide SE Oligonucleotide SE	Oligonucleotide SE Human flt-1 and KD Substrate for hamm Human FMOZ gene po Human AAASZ gene al Human AAASZ gene al Human FOS gene all Human FOS gene all Human PLAU gene Primer for FY gene Human PLAU gene Human PLAU gene Human AAAAT gene Human AAAAT gene Human AAAAT gene Furines AAAAT gene Human AAAAT gene Furines AAAAT gene Human AAAAT gene Furines AAAAT gene Hepatitis C virus NOT304 polymorphis
18 1 AAX38061 18 1 AAZ06579 18 1 AAZ26579 18 1 AAZ24159 18 1 AAAZ3054 18 1 AAAZ3054 18 1 AAAZ70911 18 1 AAAZ70911 18 1 AAAZ70911 18 1 AAAZ70911 18 1 AAAZ7257 18 1 AAZ70907 18 1 AAZ70907 18 1 AAZ70907 18 1 AAZ70907 18 1 AAZ10907 18 1 AAZ10707 19 1 AAZ10707 10 1 AAZ10707 11 1 AAZ107	лапаланананан
	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
0 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

	HIMA class I allele Human probe SB188 Cholesterol homeos Cholesterol homeos Cholesterol homeos Methylphosphonate hwill gene exon 14 Primer #1 for SWSS Rabbit CETP hairpi Human filt VEGF re Sense oligonucleot Antisense oligonucleot Antisense oligonucleot Antisense oligonucleot Antisense oligonucleot Antisense oligonucleot Antisense oligonucleot Human Gosinophil m p53 gene antisense Human Rhoc phospho Human G-alpha-13 a Sensory neurone sp Human G-alpha-13 a Sensory neurone sp Human major basic Nucleotide sequenc PCR primer used to Human soluble prot Low adenosine anti Human Diallelic ma Human biallelic ma Human hiallelic ma Human major basic Human major basic Human major basic Human major basic
· · ·	1 ADE13422 1 ADE30854 1 ADE30854 1 ADE30854 1 ADE30851 1 AAC22270 1 AAC30920 1 AAT16428 1 AAT76130 1 AAT85604 1 AAT85604 1 AAT85604 1 AAT85604 1 AAT85604 1 AAT61003 1 AAC41003 1 AAC41003 1 AAC4103 1 AAC4103 1 AAC4103 1 AAC31800 1 AAC31800 1 AAC31800 1 AAC31803 1 AAC31803 1 AAC31833 1 AAC3153 1 AAC31535 1 AAC31535 1 AAC31535 1 AAC31535 1 AAC30095 1 AAC50095 1 AAC50095 1 AAC50095
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Human BGF-R target Human BGF-R target Mouse IL-2 recepto Mouse IL-2 recepto Mouse IL-2 recepto Mouse IL-2 recepto Human TIE-2 substr Integrin alpha 6 s Human TIE-2 substr Human TIE-2 substr Human TIE-2 substr Human TIE-2 substr Human Genomic SNP Human Chell ribozym Hammerhead ribozym Hammerhead ribozym Hammerhead ribozym Human Chkl ribozym Human Chkl ribozym Human Chkl ribozym Human Chkl ribozym Human CD20 Inozyme Human CD20 Inozyme Human CD20 Amberzy Mull mutation corr Mull mutation corr Mull mutation corr Mult mutation corr Mult mutation corr Human CD20 Amberzy	GDMLP-117 GDMLP-
1 AAV97255 1 AAV97255 1 AAV97036 1 AAV95036 1 AAV95035 1 AAAV95035 1 AAAV95037 1 AAAV96037 1 AAAV96037 1 AAAV96036 1 AAAV96026 1 AAAX96428 1 AAAX36429 1 AAAX36429 1 AAAX36429 1 AAAY9629 1 AAAY9629 1 AAAY9629 1 AAAY9647 1 AAAY9666 1 AAF0073373 1 AAAY94676 1 AAF0073373 1 AAAY94676 1 AAF0073373 1 AAAY94676 1 AAF0073373 1 AAAY94676 1 AAF007374 1 AAF00953 1 AAAY94676 1 AABA80289 1 AAAY9688 1 AAAY9968 1 AAAY9968 1 AAAY9968	
क्रा के वर्ष क	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2

Human DDB2 antisen Human DDB2 antisen PCR primer for Tum Sequencing primer Oligoribounclectid Oligonuclectide SE	Oligonuclectide SE Oligonuclectide SE Oligonuclectide SE Oligonuclectide SE Oligonuclectide SE Oligonuclectide SE	Oligomucleotide SE Oligomucleotide SE Oligomucleotide SE Oligomucleotide SE Oligomucleotide SE Oligomucleotide SE Oligomucleotide SE Oligomucleotide SE Oligomucleotide SE	Oligonucleotide SE Oligonucleotide SE Oligonucleotide SB	Oligonucleotide SE Synthetic Primer Human B7-2 hammerh	Mass spectrometric DNA sequence of th Probe used to iden Substrate for hamm 15-mer oligonucleo Human IGERB allele Human IGERB allele Human GERB allele Human CHMRI allele 15-mer template ol Solid state sequen IGEBP2 oligonucleo IGEBP3 oligonucleo	human CASF5 gene a Solid state sequen
AAL43528 AAL43527 AAX28247 AAX28247 AAX00738 AAV00738 ABH25420 ABH25420 ABH25420 ABH25420	1 ABC63553 ABF40780 ABF40781 ABF40781 ABF40781 ABF51680 ABF5179	ABE37365 ABE84669 ABE84669 ABE84668 ABE43235 ABE56534 ABF57369	ABH5/80/ ABF40790 ABF40790 ABF60806 ABF50807 ABF55835 ABF55421 ABC99028 ABC99028 ABC99028	ABF56233 ABF45910 ABF40791 ABF40791 ABF68103 ABF34392 ABF34392 ABF347368 ABF87368 ABF87368 ABF87364 AAX624934 AAX65705	AAV33 AAV42 AAX42 AAZ63 AAC68 AAC68 AAF85 AAF85 AAF85 AAF85 AAF85 AAF86 AAF86 AAF86 AAF86 AAF86 AAF97 AAF97 AAF97 AAF97	ABK11880
00-1-1					2	
4 4 4 4 W W W W W W W W W W W W W W W W	α		, u u u u u u u u u u u u v ù ù ù ù ù ù ù ù ù ù ù ù ù ù ù ù ù ù ù		๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛ ๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛๛	 6. E
111 111 101 101 101 101 101 101 101 101	4. 4. 4. 4. 4. 4.				**************************************	11.4
0 910 0 912 912 0 914 0 916 0 916 0 919	0 920 0 920 0 920 0 924 0 925	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 00000	0 0000 99999999999999999999999999999999	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
DNA PCF gene se gene se er used K-1 anti 136 used na VRN1 na VRN1 er #8.	kno c antisense ph Human glaucoma-cod C neoformans strai Human chromosome 1 Human chromosome 1 Human chromosome 1 Human cretina speci	sequenc ZTMPO-1 alpha-f ZTMPO-1 DAP12 s tation Ob gene eosinop major b	Human WSX receptor Human WSX receptor Human osstrogen re Human osstrogen re Mouse alpha-fetopr Pluripotent stem c Human obese (ob) g Novel human secret Human WSX receptor Human WSX receptor	Human secreted/tra Novel human secret Novel human secret Nov protein-relate E. intestinalis sp Primer oligo used Primer oligo used Primer oligo used Human WSX receptor Human PRO PCR prim Human PRO PCR prim Human endothelial Human endothelial Human PRO 1790 Tag	Human PRO 1780 Tag Oligonucleotide SE Oligonucleotide SE Oligonucleotide SE Oligonucleotide SE Nigonucleotide SE Human FRBPB allele ASO primer, #8, fo SSTR4 gene polymor Human TRYB allele Human HTRSA gene a	PCR primer IFN-gam
	444444			напананана	18 1 ADD704919 18 1 ADD30641 18 1 ADD30568 18 1 ADD30521 18 1 ADD40522 18 1 ADE5063 18 1 ADE5036 18 1 ADE5036 18 1 ADE5036 18 1 ADE30353 18 1 ADE31454 13 1 ABF31454 13 1 ABF31454 13 1 ABF31455 15 1 AAR340555 15 1 AAR34056 15 1 AAR34051	-
				न्त्न्त्न्त्न्त्न्त्न्त्न्त्		o.
111.88 111.88 111.88 111.88 111.88	11111111111111111111111111111111111111	111.8 111.8 111.8 111.8 111.8	111.8 111.8 111.8 111.8 111.9		11.8 11.8 11.8 11.8 11.8 11.6 11.6 11.6	
	8848 8850 8852 8852 8853		8 8 6 5 5 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	u 0

Human KTOMla porti		Human HTPL scannin	Human HIPL Scannin Human HTPL scannin	HTPL	Human ERG DNAzyme	ERG hammerh	Human ERG hammerne Human ERG hammerhe	G-prote	POSHL1	Human POSHL1 SCAIN		POSHL1	Human POSHLI SCANN		POSHL1	POSHL1	Human POSHL1 scann	CLCA1 gene	CLCA1 gene	CLCAl gene	CLCA1 9	Human tumour suppr	Human tumour suppi G-protein compled	G-protein coupled	G-protein coupled	G-protein coupled	a)	The Transpires Transpires Transpires		Tumour suppression	Tumour suppression	Tumour suppression	umour	Tumour suppression	NEKR SUB-unit modu	NFKB sub-unit modu	Necrosis factor ka	Himan MDZ3 scannin	MDZ3	MDZ3	MDZ3	Human HER2 DNAzyme	HER2	HER2		HBV amberzyme subs HBV amberzyme subs	nus stra	berzym	HCV DNAzyme substr	Murine oligonucleo	Murine oligonucleo	Murine oligonucleo	Murine oligonucieo Murine oligonucleo	Murine oligonucleo	Murine oligonucleo Murine oligonucleo	
	ABQ64014					ABK18227					ABV89488																																										1 ACC68413		1 ACC63951	
1	17,11																																			17																			17	
	i m c										20 co		•	•		•		•					•	•			•	•	•		6.6	•	, m	3.9	რ ი	2 m	3.9	ი ი.	η (r	, o,	3.9	w .	, m	9.6	3.9	ω . σ. σ	א ני א פ	, m	3.9	ω . σ. σ	n m	3.6	6. 6.	ท m) M (ъ.
•	11.	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4				11.4			11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4	11.4		•	11.4			11.4	11.4		11.4	11.4	4.11	11.4	11.4	11.4	11.4	11.4	11.4	11.4	4.4.	11.4
1	1057	C1059	c1060	C1062	1063	1065	1066	1067	C1069	C1070	1071	C1073	c1074	c1075	C1075	C1078	C1079	C1080	C1081	C1082	C1084	C1085	1086	1087	1088	1090	1001	1092	c1093	1095	1096	1097	860T0	1100	C1101	1102	1104	c1105	1106	1108	1109	c1110	C1111	C1113	1114	c1115	C1116	C1118	c1119	c1120	1121	1123	1124	1125 71126	1127	1128
-	ASO probe #1, used Human neurotrophin	Hepatitis C virus Human lysosomal ac	Human CALM1 gene a	Human papillomavir PCR primer #1 for	Phosphorothioate-c	Human HNG gene exo HPV-16 inhibitor.	HPV-16 inhibitor.	Triple helix third	ICAM-1 CIPIE DELL ICAM-1 triple heli	Tumour suppression	Human TIE-2 substr	Chicken C CHKHIN.	Beta-APP codon 717	Mouse flt-1 VEGF r	GF r	Mouse Livel VEGF I	Human EGF-R target	Human EGF-R target	Human TIE-2 substr	Human C-rat target	Human C-rai caiged	Human C-raf target		eic	Template pyrimidin	Oestrogen receptor	Nucleic acid trans	-5	NOGO	Human NOGO Inozyme	Human NOGO Zinzyme	NOGO	NOGO	Human NOGO Inozyme	NOGO	NOGO	Human NOGO Amberzy	ဂ္ဂ	Human NOGO Amberzy	ADD mutation corr	LDLR mutation corr	APP mutation corre	Wild-type beta amy	Byrimidine_rig	Fyrrmrolls or Human GDMLP-1 17-m	Human GDMLP-1 17-m	Human GDMLP-1 17-m	Human GDMLP-1 17-m	Human GDMLP-1 17-m	Human GDMLP-1 17-m	Human GDMLP-1 17-m	Human GDMLP-1 17-m Human GDMLP-1 17-m	Human GDMLP-1 17-m	Human GDMLP-1 17-m	Human GDMLP-1 1/-m Human GDMLP-1 17-m	Нимап GDMLP-1 17-ш
	15 1 ABK12921 15 1 AAD32304	д -		٦,		н г		н.	٦,	4 ~	н	Н.	- ب		Н	н,	٦,		П	Η.	Н.	٦.	٦.	Н	Н	Н,	-1 -	4	ι	Н,	٦,	-	٦.	-		Н.	-		Н	н,	٦,	4 ~	Н	Н,			7	Η,	-		٦,		4 ~			11
								•	•	r (*		Φ.	. n	, 0	ev.	on (n o	, 0	. 0	6	о (э c	ח ס	, o	. On	σ,	on c	ת מ	. თ	6	on o	non	6	on 0	n o	. თ	on 0	n 0°	б	σ,	ם תם	n 01	6	σ,	on o	ש פט	0	6.	م ه	י סי	σ.	0.0	<i>ა</i> . თ.	. 6.	o. o.	ا م
	11.4 3.9												א ני	חח	m	m r	ى رى	ייי רי	m	М	m	en c	ኅ ແ	ייי	m	m	m r	יחרי	nm	m ·	יי ניי	יים ני	(T)	מו ני	1 6	1 (1)	., .	, tr	(-)		, .	1 (-1	1.1	, .	., .	.,										
	c 983 11 c 984 11																																																							

	SINGLE DIDLECTIDE Hammerhead ribozym	se pri Chk1 Chk1 Chk1 CD20 CD20 CD20 NOGO	HRCAL mutation cor Factor VIII mutati PERSMI mutation cor Factor VIII mutati BECAL mutation cor BECAL mutation cor BECAL mutation cor Retinoblastoma mut LDLR mutation corr Retinoblastoma mut LDLR mutation corr LDLR mutation corr LDLR mutation corr DDLR mutation corr BECAL mutation corr DDLR mutation corr LDLR mutation corr LDLR mutation corr LDLR mutation corr LDLR mutation corr LDLR mutation corr LDLR mutation corr	PSENI matation correpts mutation correpts mutation correpts primer using them of RP primer using Human GRID G-cleav Human GRID DNAZYME Human GRID Einzyme PCR primer for amp Probe PN(n)C used MD-1 expression in Human GDMLP-117-m
AAA32731 AAA32763 ABN86980 AAA03122 AAA03122 AAF18853 AAF18853 AAAE4071 AAZ61023 AAAZ608 AAC70538	AAF01739 AAF01739 AAF02391 AAF02206 AAF02342 AAF02342	AAC73158 AAH95847 AAH95842 AAH95804 ABK02776 ABK02777 ABK0259 ABK01106 ABK01106	ABA77238 ABA77238 ABA79157 ABA79155 ABA78153 ABA78154 ABA77677 ABA81112 ABA77678 ABA81113 ABA777446 ABA773446 ABA77347	ABA81353 ABA77445 ABA77445 AAH27335 AAH26862 AAH26862 ABL46986 ABL46701 ABL46701 ABL46701 ABL46701 ABL46701 ABL06108 AAN05108 ABN005108 ABN007397 ABN008128 ABN007397
	чананана	пананана		
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			, , , , , , , , , , , , , , , , , , ,	
	111111111111111111111111111111111111111			
01202 01203 01203 01204 01205 01206 01208 01210 01211 1211 12114	c1216 c1217 1218 c1219 c1220 1221	C1223 C1224 1225 C1226 1227 1228 C1229 C1230 C1231	1232 61233 61233 61234 1235 61234 61239 61240 61241 61241 61242 61243 61243	1246 1248 1248 1258 1259 1251 1253 1255 1255 1255 1256 1266 1266 1267 1267 1268 1270 1271 1271 1271
oligonucleo oligonucleo oligonucleo oligonucleo oligonucleo oligonucleo oligonucleo oligonucleo oligonucleo suppression suppression suppression suppression suppression suppression	n GAP_N DNA 17 n GAP_N DNA 17 e JH3 for HNK- ois virus Bsu consec oligonic adenosine Al	ddenosine anti n adenosine Al n adenosine Al n adenosine Al n inle virus ge n genomic DNA n adenosine Al is vector PCR pis virus PCR (17+) IRP-I	chain scann scann Syn Syn Syn Syn in prob Igonuc lecrhea I beta nammer nammer nammer llysin	iral phosphor iral phosphor filt.1 VEGF r filt.1 VEGF r filt.1 VEGF r filt.1 VEGF r capto for b c-fos target ense oligonuc ense oligonuc EGF-R target o citrate syn idine glucosy ell-2 recept rin alpha 6 s vin cubunit b TIE-2 substr rin alpha 6 s A-Raf substr erin alpha 6 s A-Raf substr C-raf target adenosine Al adenosine Al re-specific kallikrein P kallikrein P kallikrein P weak acid pu rimer for int rimer for int
Murine Murine Murine Murine Murine Murine Tumour Tumour Tumour Tumour	Human G Human G Probe JJ Sindbis Antisen Human a	Low adeno Human adel Human adel West nile Human gen Human adel Sindbis w Sindbis w HSV-1 (177	Human heavy chain Human POSHL1 scann Human POSHL1 scann Primer BTB3F. Syn Rat GDNF gene prob Probe MP2 for dete W09526733 oligonuc Rat ICAM hammerhea Interleukin-1 beta Human c-myb hammer Human c-myb hammer Rabbit stromelysin Rabbit stromelysin Rabbit stromelysin	Antiviral phosphor Mouse filt-1 VEGF r Human filt VEGF r Primer CAP10 for b Human c - fos target Antisense oligonuc Antisense oligonuc Antisense oligonuc Human EGF-R target Potato citrate syn Solanidine glucosy Canine IL-2 recept Integrin alpha 6 s Aryl hydrocarbon n Integrin alpha 6 s Aryl hydrocarbon n Integrin subunit b Human TE-2 substr Integrin alpha 6 s Human A-Raf substr Human C-raf target Human C-raf target Human adenosine Al Human adenosine Al Human adenosine Al Human kallikrein P Human kallikrein P Human kallikrein P Human Aslikrein P Human Aslikrein P Human Aslikrein P Human Kallikrein P F Reast weak acid pu PCR primer for int Thr (ACA) tRNA prob
ACC6462  Murine     ACC63198	ADD20778	1 AAA31254 LOW & AAA0123 Human AAF18886 Human AAS56014 West Human AB294580 Human AB294580 Human AB294590 Sindl ADAS0732 Sindl ADAS0723 HSV-:	1 Abbil3206 1 Abbil3206 1 Abv90403 1 Abv90404 1 AAQ30405 1 AAC30405 1 AATS432 1 AATS208 1 AATS257 1 AAT81257 1 AAT81259 1 AAX63309 1 AAX63335 1 AAX63335	AAT12442
17 1 ACC64621 Murine 19 17 1 ACC64621 Murine 19 17 1 ACC64198 Murine 19 17 1 ACC64157 Murine 19 17 1 ACC64136 Murine 19 17 1 ACC6328 Murine 19 17 1 ACC6328 Murine 19 17 1 ADB41237 Tumour 19 17 1 ADB41237 Tumour 19 17 1 ADB41459 Tumour 19 17 1 ADB41459 Tumour 19 17 1 ADB41459 Tumour 19 17 1 ADB414151 Tumour 19 17 1 ADB414151 Tumour 19 17 1 ADB41415	17 1 ADD20778 Human 19 17 1 ADD20779 Human 19 1 AAT30557 Prob 19 16 1 AAX59308 Sindl 19 16 1 AAX53321 Human 19 16 1 AAX53321 Human 19 16 1 AAX5355 Sindl	16 1 AAA32764 LOW (AAA32764) LOW (AAA)3123 Human (AAA)3123 AAAA3123 AAAAA (AAA)3123 AAAAAA (AAA)3123 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	9 16 1 ABES1206 9 17 1 ABV90403 9 17 1 ABV90404 9 17 1 AAQ27641 9 17 1 AAQ378121 9 17 1 AAAS5906 9 17 1 AATS2208 9 17 1 AATS2208 9 17 1 AATS256 9 17 1 AAX65909 9 17 1 AAX63909 9 17 1 AAX63935 9 17 1 AAX63935 9 17 1 AAX63935	1 AAX14442 1 AAX74442 1 AAX75103 1 AAX951303 1 AAV95310 1 AAV96511 1 AAV96514 1 AAV96514 1 AAV96514 1 AAV97491 1 AAV97491 1 AAV97491 1 AAX13155 1 AAX11430 1 AAX1155 1 AAX1155 1 AAX21288 1 AAX53320 1 AAX53320 1 AAX53320 1 AAX3128 1 AAX311503 1 AAX31503 1 AAX31503 1 AAX31503
3.9 17 1 ACC64621 Murine 3.9 17 1 ACC64621 Murine 3.9 17 1 ACC64198 Murine 3.9 17 1 ACC64157 Murine 3.9 17 1 ACC64136 Murine 3.9 17 1 ACC6328 Murine 3.9 17 1 ACC64663 Murine 3.9 17 1 ADB41237 Tumour 3.9 17 1 ADB41237 Tumour 3.9 17 1 ADB41459 Tumour 3.9 17 1 ADB4145	3.9 17 1 ADD20778 Human 3.9 17 1 ADD20779 Human 3.9 19 1 AAT30557 Problem 3.9 16 1 AAX59308 Sindl 3.9 16 1 AAX53321 ADD20794 ADD2079 Sindl 3.9 16 1 AAX53321 Human 3.9 16 1 AAX58555 Sindl 3.9 16 AAX585	3.9 16 1 AAA32764 LOW (3.9 16 1 AAA32764 Human 3.9 16 1 AAF18886 Human 3.9 16 1 ABS6014 West 3.9 16 1 ABS6551 Human 3.9 16 1 ABS6551 Human 3.9 16 1 AAB36750 Sindl 3.9 16 1 AAA50723 Sindl 3.9 16 1 AAA007235 Sindl 3.0 16 1 AAA007235 Sindl 3.0 16 1 AAA007235 Sindl 3.0 16 1 AAA00	3.9 16 1 ABCB1206 3.9 17 1 ABC90403 3.9 17 1 ABC90404 3.9 17 1 AAC91041 3.9 17 1 AAC91041 3.9 17 1 AAC90805 3.9 17 1 AAC90806 3.9 17 1 AAT82208 3.9 17 1 AAT82208 3.9 17 1 AAT81257 3.9 17 1 AAT81257 3.9 17 1 AAT81258 3.9 17 1 AAT81258 3.9 17 1 AAT81258 3.9 17 1 AAC63938 3.9 17 1 AAC63938	9 17 1 AAX12442 9 17 1 AAX759602 9 17 1 AAX75103 9 17 1 AAX75103 9 17 1 AAY95350 9 17 1 AAY96514 9 17 1 AAV96514 9 17 1 AAV96514 9 17 1 AAV96514 9 17 1 AAV96514 9 17 1 AAX1035 9 17 1 AAX1035 9 17 1 AAX1355 9 17 1 AAX12502 9 17 1 AAX12502 9 17 1 AAX23128 9 17 1 AAX23156 9 17 1 AAX23156 9 17 1 AAX23156 9 17 1 AAX23156

Human adenosine Al Human adenosine Al Human tumour suppr Human tumour suppr	tumour	Human tumour suppr Human tumour suppr	ш.	G-procein coupled	Human erythropoiet	Tumour suppression	Tumour suppression	Tumour suppression	suppressi	suppressi	suppre	suppress	suppress	Tumour suppression	sandans	suppress	suppress	sanddas	NFKB sub-unit modu	NFKB sub-unit modu	lo-unit	no-unit	NFKB SUD-UNIT MOGU	MD27 aca	Human MD27 scammin	Human MDZ7 scannin	Human MDZ12 scanni	Human MDZ3 scannin	Human MDZ3 scannin	Human MDZ7 scannin	Human MDZ3 scannin	Human MDZ3 scannin	Human MD24 Scannin	Himan MDZ4 scannin	Human MDZ3 scannin	Human K-Ras DNAzym	Human HER2 DNAzyme	Human H-Kas DNAZYM Himan HDD2 DNAZYMA	Human HEB2 DNAzvme			hammerhead ri	minus st	THE DIAZYIIIE SUDSCI	DNAzyme		minus st	inozym	DNAzyme		inozvi		hammerhe		DNAZYMe	HCV Winus strand D	HCV DNAzyme substr	hammer	HCV MINUS SCIANO D
ABZ94547 ABZ94579 ACC52633 ACC54127	ACC53769	ACC52867	ACD00458	ACD00459	ACC59641	ABT36125	ABT39970	ABT39992	AB140031	ABT36877	ABT39342	ABT35128	ABT36417	ABT37501	AB138082 ABT35162	ABT36182	ABT36543	ABT36173	ACA07722	ACA06766	ACA06714	ACA08989	ACA07820	ACA06442	ADB03629	ADB049/1	ADB03634	ADB00412	ADB00413	ADB03630	ADA99515	ADA99513	ADB02070	ADB03633	ADA99257	ABZ60425	ABZ64548	ABZ61871	4BZ65463	AB263302	ACD59642	L ACD50453	L ACD64292	L ACD54830	L ACD33333	1 ACD65163	1 ACD62617	1 ACD52629	1 ACD59614	1 ACD59285	1 ACD61386	1 ACD52930	1 ACD50468	1 ACD52812	1 ACD57507	1 ACD59286	1 ACD58496	ACD511	ACD6510
17 11 17 11 17 11 17 11																																																											
	. 6.	ლ ო თ. თ	, e,	ص و و	n r	, e,	9.0	თ. ი	ν, c	n 0	9.6	3.9	3.9	თ ი	n c	, o	, o	9.6	3.9	3.9	3.9	3.9	6.	6. 6.	o. 6	w c	ים מים	י ה הים	. n	6.6	3.9	3.9	ω, 0, 0	λ. υ. σ	n ~	. e.	3.9	ص و و	n o		, o	6.6	3.9	6. 6.	ا ا		, 6	9.6	9. E	3.9	თ ი ი	n 6	6.8	3.9	ه. و. و	۳ ر م. ه	ე (ი	, e	e.
111.2	11.2	11.2	11.2	11.2	27.7	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	7.5	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	7 T T	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	21.1	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
C1348 C1349 C1350	1352	C1353	1355	1356	C1357	1359	1360	1361	1362	1364	c1365	c1366	1367	c1368	1 6	1370	1372	1373	1374	1375	C1376	1377	c1378	1379	c1380	1381	C1382	1383	1385	c1386	C1387	c1388	c1389	C1390	1391	1393	1394	1395	c1396	CL397	00000	01400	C1401	1402	C1403	C1404	1406	1407	1408	c1409	c1410	1411	1413	1414	1415	C1416	1417	1419	c1420
Human GDMLP-1 17-m Human GDMLP-1 17-m Human GDMLP-1 17-m	-1 17	<u></u>	GDMLP-1 17	GDMLP-1 1	-1 17	GDMLP-1 17	GDMLP-1 17	GDMLP-1 17	GDMLP-1 17	GDMLP-1 1	įπ	KTOMLa	Human KTOM1a porti	KTOMla	KTOMIA	KTOMIA	NIOMIA VEOMIA	KTOMIA	TOMIA	KTOMIa	KTOM1a	KTOM1a	n KTOMla	pig i	HTPL		HTPL	Human HTPL	Human HTPL Scannin Human Nebral Scann	Himan NEDD-1 scann	Miring Tkhkan exon		Human ERG DNAzyme		gene po	Human		_	POSHL1	POSHL1 s		OCHILL	POSHL1 s	POSHL1 s	POSHL1 s	POSHL1 s	POSHL1		POSHL1	POSHL1	-	Human POSHL1 scann	POSHI,1	POSHL1 8	HLA	HLA	HLA	ene	n CLCA1 g
17 1 ABN00238 17 1 ABN00811 17 1 ABN07402	НН		н,	-	н,			Н	1	Н.	٦,	٦.		Н	Н	Н	П,	٦.	٦ ,	٦,	-	-	1 ~	1 ~	<b>H</b>	Н	Т	7	٠ ٠	٦,	٦,	٦,	<del>-</del>	Н	Н	Н г	٦,	1 11	۲	Т	н,	٠,	٦,	٦,	٦	Н.	Η.	٦,	٠,	-	-	Н,			٠.	. <b>,</b> -₹	Η,	-	
6.00°	w	3.9	ი. ი. ი	, m	3.9	w c	, n	3.9	3.9	9.6	w i	ν α ν α	، د . و	9.6	3.9	3.9	ه. ه.		ν. υ.			, m	) c.	. m	, o	3.9	3.9	3.9	ۍ. و. و	س ر ص و		n o	. o.	3.9	3.9	თ ი	n 0	. m	6.8	3.9	ი. ი.	6. 6.	n. o	, o.	3.9	3.9	9.6	س ر ص و	n.a	ה ה ה	6.6	3.9	m c	n r	. e.	3.9	3.9	ო ო თ. თ	3.6
11.2 11.2 11.2	11.2	11.2	27.5	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	2.11	21.5	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	71.2	11.2	11.2	11.2	11.2	211.2	11.2	11.2	11.2	11.2	11.2
1275 c1276 c1277																																																											

```
Cholesterol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tumour
                                     ABX95996
ACC67175
ACC63990
                                                                                                                       ACC63273
ACC65102
                                                                                                                                                                                ACC63632
ACC66459
                                                                                                                                                                                                        ACC66556
ACC63617
                                                                                                                                                                                                                               ACC67005
ACC65130
                                                                                                                                                                                                                                                                 ACC83628
ACC59780
ADA44940
                                                                                                                                                                                                                                                                                                   ADA44939
ACC85119
ADA21025
ADA21026
                           ACD55355
                                                                                                                                                                                                                                                                                                                                                  ADB42667
ADB42854
                                                                                                                                                                                                                                                                                                                                                                                     ADB40866
ADB41677
                                                                                                                                                                                                                                                                                                                                                                                                           ADB41501
ADB41456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADC03742
ADC03743
ADC03740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADC37897
ADC37894
ADB44493
                                                                                                                                               ACC66670
                                                                                                                                                                                                                                                                                                                                                                                                                                    ADB42400
                                                                                                                                                                                                                                                                                                                                                                                                                                                ADB44144
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADB42855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADB45944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADD42044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ41002
  01423
14223
14223
14224
14230
14240
14240
14240
14240
14240
14240
14240
14240
14250
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
14260
```

Immunosuppressive; immunostimulatory; antiinflammatory; cytostatic; neuroprotective; antimicrobial; gene therapy; vaccine; amylase; cancer; amyloid protein; angiopoletin; apoptosis related protein; cadherin; Human SNP oligonucleotide #5308. AAL32100 standard; DNA; 50 24-JAN-2002 AAL32100/c 

Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;

JP2001321190-A.

Homo sapiens.

PCR primer; ss

Human chromosome 1p36-35 PCR primer SEQ ID NO:344.

The present invention relates to oligonucleotides encoding polymorphic variants of proteins related to amylases, amyloid proteins, angiopoietin, apoptosis related proteins, cadherin, cyclin, polymerase, oncogenes, histones, kinases, colony stimmlating factors, complement related proteins, cytochromes, kinesins, cytokines, interferons, interleukins, grotein coupled receptors and thioseterases. The present sequence is one such oligonucleotide. The oligonucleotides and the peptides encoded by the may be used in the prevention, diagnosis and treatment of diseases complicated with inappropriate expression of the proteins listed above. Disorders that may be prevented, diagnosed and/or treated include consistencial diseases with a genetic component, such as autoimmune diseases (e.g. rheumatoid arthritis, multiple sclerosis, diabetes, systemic lupus erythromatosus and Garve's disease), inflammation, cancer colour and kidney, cancers of the bladder, brain, breast, colon and kidney, conversions. cyclin; polymerase; oncogene; histone; kinase; colony stimulating factor; complement related protein; cytochrome; kinesin; cytokine; interferon; interleukin; G-protein coupled receptor; thioesterase; inflammation; multifactorial disease; autoimmune disease; infection; Polymorphic nucleic acids encoding e.g. amylases, cyclins, polymerases, oncogenes and histones, useful for diagnosing and treating, e.g. cancer, autoimmune diseases and infections. 918 ATCATCACCACCACCTCCAGAGATTTTACGCAAGAGAGCCAAATTGA 967 17.2%; Score 50; DB 1; Length 50; 0; Indels Sequence 50 BP; 9 A; 7 C; 15 G; 19 T; 0 U; 0 Other; 0.00037; 100.0%; Pred. ... Claim 1; Page 2914; 4143pp; English. 28-DEC-1999; 99US-0173419P. 27-DEC-2000; 2000US-00173419. 28-DEC-2000; 2000WO-US035498 BP. nervous system disease; ss. ABL43300 standard; DNA; 24 (first entry) Conservative Shimkets RA, Leach M; (CURA-) CURAGEN CORP. WPI; 2001-465210/50. Local Similarity WO200147944-A2. Homo sapiens. 05-JUL-2001 11-APR-2002 20; 20 ABL43300; Query Match ABL43300/c Best Loc Matches RESULT g Guinea pig integri Murine oligonucleo Murine oligonucleo Murine oligonucleo Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Murine oligonucleo
Klebsiella oxytoca
Human erythropoiet Consensus integrin Guinea pig integri Human erythropoiet Guinea pig beta_6 Guinea pig beta_6 Tumour suppression Human Na/H exchang Human Na/H exchang Human Na/H exchang Human Na/H exchang Tumour suppression Human AMLPla scann Human AMLPla scann Fumour suppression Tumour suppression Plant growth assoc Mouse HUI77/HUIV26 suppression Suinea pig integri homeos Human RhoC phospho Rho C antisense ph Rice acetolactate ALIGNMENTS

ó

Gaps .,

```
/note= "Phosphorothioate backbone; All cytidines are methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         *tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag=
                                 WPI; 2002-144136/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
(GENO-) GENOTEX YG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC82862;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC82862/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                 The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in method comprises; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; co a signal corresponding to the marker is detected from the resultant corresponding to the marker is detected from the resultant corresponding to the marker is detected from the resultant corresponding to the marker sequence; (d) the order plates containing the clones having said marker sequence; (d) the order cof the maximum in the specified discrimination Nos. to array the multiwell cof the maximum in the specified discrimination Nos. are mixed respectively in each wells of longitudinal collutures are maplified by using the above primer; (g) signals and lateral directions; (f) the mixed clones are cultured and the constituted as the positions on the chromosome and arrayed. The constituted as the positions on the chromosome and arrayed. The constituted as the positions on the chromosome and arrayed. The constituted as the positions on the chromosome and arrayed. The chromosome for human chromosome and arrayed, and PRE4532 represent correspondent por purpose to the present invention correspondent invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8.3%; Score 24; DB 1; Length 24; 100.0%; Pred. No. 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human chromosome 1p36-35 PCR primer SEQ ID NO:343.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 24 BP; 8 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  966 GACTCTCTAAATCTGGTGTATGGG 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  dacrerchaareregrerarege 1
                                                                                                                                                                                                                                               Claim 4; Page 11; 528pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABL43299 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12-MAR-2001; 2001JP-00068285.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-MAR-2000; 2000JP-00066716.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.08;
                                                           12-MAR-2001; 2001JP-00068285.
                                                                                             10-MAR-2000; 2000JP-00066716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIKA ) RIKAGAKU KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                           (RIKA ) RIKAGAKU KENKYUSHO.
(GENO-) GENOTEX YG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 8.3
Best Local Similarity 100.
Matches 24; Conservative
                                                                                                                                                                                                              Arraying genome clones
                                                                                                                                                                             WPI; 2002-144136/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JP2001321190-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-NOV-2001.
                             20-NOV-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABL43299;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human;
```

ð

υ

.20

Ø

```
The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates (b) a primer designed based on the chromosome marker completed; (b) a primer designed based on the chromosome marker is equence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant corpuses containing the clones having said marker sequence; (d) the order of the maximum in the specified discrimination Nos. to array the multiwell corpuses; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the corpus in the multiwell plates of the specified from the detected result; and (i) the clones are constituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABLA3522 represent corpus are for human chromosome lab3-35 bNA, and ABL45321 capresent corpus corpus for human chromosome 21q221, which are represent corpus in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothicate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 20; DB 1; Length 20; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PLA2 antisense oligonucleotide, ISIS 128034.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.0%; Pred. No. 29;
:ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              iocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               869 GGAACACTTTCCTGAGATGC 888
                                                                             Claim 4; Page 11; 528pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC82862 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20; Conservative
Arraying genome clones.
```

ö

WO2003038050-A2

```
Human PLA2 antisense oligonucleotide, ISIS 128033.
                                                                                                                                                                               Sequence 20 BP; 6 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                865 AGTIGGAACACITICCIGAG 884
                                                                                                                                                                                                                                                                                                                                                             /mod base= OTHER
                                                                                                     Claim 3; Page 75; 99pp; English
                                                                                                                                                                                                                       methylcytidines
                      28-OCT-2002; 2002WO-US034654.
                                 01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                       ACC82861 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                             27-AUG-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                            Ö
                                                                                                                                                                                                                                                                                                                                                         ๙
                                                                                                                                                                                                                                                                                                                                                                                   /*tag= b
                                                                                                                                                                                                      Conservative
                                            (ISIS-) ISIS PHARM INC
                                                        Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                  1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                           /*tag=
                                                                    WPI; 2003-430513/40.
                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                           Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                                                                                                   modified_base
                                                        Bennett CF,
                                                                                                                                                                                                                                                                                                                           sapiens
           08-MAY-2003
                                                                                                                                                                                                     20;
                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                  ACC82861;
                                                                                                                                                                                          Query Match
                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                  ACC82861/c
                                                                                                                                                                                                                                             RESULT
à
                                                                                                                                                                                                                          셤
```

```
diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                          New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA265, hVPLA2 and HPLA2-10. The antisense oligomucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6.9%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16..20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PLA2 antisense oligonucleotide, ISIS 128021.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP; 6 A; 3 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCCAGTTGGAACACTTTCC 880
                                                                                                                                                                                                                                                                                                                                                                       Claim 3; Page 75; 99pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag= c
/mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCCAGTTGGAACACTTTCC 1
                                                                                             28-OCT-2002; 2002WO-US034654.
                                                                                                                                 01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACC82849/c
ID ACC82849 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag=
                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .20
                                                                                                                                                                                                                 Wyatt JR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag=
                                                                                                                                                                                                                                                     WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     L Similarity
20; Conserv
                  WO2003038050-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nodified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified_base
                                                                                                                                                                                                                 Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                      08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC82849:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calculum dependent phospholipase A2, PLAGS, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoinmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The artisense compounds are also useful for modulating PLA2 group V. The artisense compounds are also useful for faignostics, therapeutics, prophlaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·;
                                                                                                                                                                                                                                                             New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6.9%; Score 20; DB 1; Length 20; 00.0%; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.08; Pred. w.
```

; 0

Gaps

.,

```
WO2003038050-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-AUG-2003
                                                                      08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC82869;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                           Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC82869/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                       The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2. PLA2GS, hVPLA2GS, hVPLA2GS, hVPLA2L3 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                    New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             / not\bar{e} = "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6.9%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 29; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "2'methoxyethyl nucleotides"
16. 20
/*tag= c
   /note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human PLA2 antisense oligonucleotide, ISIS 128038.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                  Example 15; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 728 CTGGTCATAGGACTTGGTAG 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= b
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Creercarageactreerag 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC82866 standard; DNA; 20 BP
                                                                                                                      01-NOV-2001; 2001US-00016149.
                                                                                          28-OCT-2002; 2002WO-US034654.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ...20
*tag=
                                                                                                                                                   (ISIS-) ISIS PHARM INC
                                                                                                                                                                                Wyatt JR;
                                                                                                                                                                                                          WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 20; Conserv
                                   WO2003038050-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-AUG-2003
                                                                                                                                                                                Bennett CF,
                                                                08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC82866/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
```

Db δ

```
The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2. PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 20; DB 1; Length 20; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /\text{not}\overline{e}= "2'methoxyethyl nucleotides" 16. .20
/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PLA2 antisense oligonucleotide, ISIS 128041.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          884 GAIGCACTIACTICAGCT 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATGCACTTACTTCTCAGCT
                                                                                                                                                                                                                      28-OCT-2002; 2002WO-US034654.
                                                                                                                                                                                                                                                                                 01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . 38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC82869 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ಹ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     *tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      *tag=
                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                            Bennett CF, Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
```

0

```
diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, phospholipase A2; PLA2; calcium dependent phospholipase A2;
PLA2G5; hVPLA2; HPLA2-10; therapy, autoimmune disorder; prophylaxis;
inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6.9%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 29; 0; Mismatches 0; Indels
                         /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1..5
/*rad base DTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human PLA2 antisense oligonucleotide, ISIS 128024.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 8 A; 6 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 973 TAAATCTGGTGTATGGGTAT 992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 3; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                        2002WO-US034654
                                                                                                                                                                                                                                                                                                 01-NOV-2001; 2001US-00016149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC82852 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ซ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                     Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ′*tag≖
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
Les 20; Conserv
                                                                                                                       WO2003038050-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Key
modified_base
                                                                                                                                                                                                                                     28-OCT-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                               Bennett CF,
                                                                                                                                                                             08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC82852;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC82852/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 9
RANGE SECOND SEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
```

ò

Gaps

.; 0

```
The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an mutoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6.9%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 29;
cive 0; Mismatches 0; Indels
                                              /note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PLA2 antisense oligonucleotide, ISIS 128037.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 6 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                         Example 15; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              758 ICCCIAGGCCICCACTICIG 777
               /*tag= c
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= b
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCCTAGGCCTCCACTTCTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                28-OCT-2002; 2002WO-US034654
                                                                                                                                                             01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                             or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACC82865 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ಥ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20; Conservative
 16. .20
                                                                                                                                                                                         (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag=
                                                                                                                                                                                                                        Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . 20
                                                                                                                                                                                                                                                    WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                        WO2003038050-A2
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                       Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACC82865;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC82865,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

; 0

modified base

08-MAY-2003

Bennett CF,

```
The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oilgonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                        New antisense oligonuclectides for modulating phospholipase A2 group V gene expression, particulatly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note= "Phosphorothioate backbone; All cytidines are methylcytidines"
1. .5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 20; DB 1; Length 20;
Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
/mod_base= OTHBR
/note= "2'methoxyethyl nucleotides"
16. .20
                                                                            /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human PLA2 antisense oligonucleotide, ISIS 128030.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 2 A; 7 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Pred. No. 29; ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              703 TCCAGCGAGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 3; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rccagcgagrcccaggagaga 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                    28-OCT-2002; 2002WO-US034654.
                                                                                                                                                                                                                                                            01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC82858 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                           υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . .20
*tag=
                                                             *tag=
                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                        Bennett CF, Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                          WO2003038050-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified_base
                                           modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-AUG-2003
                                                                                                                                                                                 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACC82858;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC82858/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    심
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA265, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ភ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6.9%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
      note= "2'methoxyethyl nucleotides"
                                                                  /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human PLA2 antisense oligonucleotide, ISIS 128019.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6.24,
100.08; PIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  880 CTGAGATGCACTTACTTCTC 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGAGATGCACTTACTTCTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 3; Page 75; 99pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                        28-OCT-2002; 2002WO-US034654
                                                                                                                                                                                                                                                 01-NOV-2001; 2001US-00016149
                                                                                                                                                                                                                                                                                                                                                                                                                                                 an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC82847 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                 *tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           L. .5
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..20
*tag=
                            6. .20
                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                              Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
les 20; Conserv
                                                                                                                              WO2003038050-A2
```

ô

Gaps

· 0

5

Key modified base

Homo sapiens

Synthetic

27-AUG-2003

ACC82847;

20

ð

RESULT 11 ACC82847/

Query Match Matches modified base

```
The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HFLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for modulating PLA2 group V. The antisense compounds are also useful for finighnostics, therapeutics, prophlaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targeted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, phospholipase A2, PLA2, calcium dependent phospholipase A2,
PLA2G5; hVPLA2, HPLA2-10; therapy; autoimmune disorder; prophylaxis;
inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6.9%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
             /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
                                                                                     'not\overline{e}= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PLA2 antisense oligonucleotide, ISIS 128032.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 8 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
1. .20
                                                                                                                                                                                                                                                                                                                                                                                      Example 15; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          834 TTTTCTTCTGAAGACAGC 853
                                                                       base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-OCT-2002; 2002WO-US034654.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACC82860 standard; DNA; 20 BP
                                                                                                                                                                                                           01-NOV-2001; 2001US-00016149,
                                                           υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-AUG-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         æ
                                                       /*tag=
 *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag=
                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                    Bennett CF, Wyatt JR;
                                                                                                                                                                                                                                                                                                  WPI; 2003-430513/40.
                                                                                                                 WO2003038050-A2
                                         modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACC82860;
                                                                                                                                                                                                                                                                                                                                             gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC82860/
à
```

Gaps

;

```
The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for modulating pLA2 group V. The antisense compounds are also useful for finagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                               ... autisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, phospholipase A2; PLA2; calcium dependent phospholipase A2;
PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6.9%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 29;
ive 0; Mismatches 0; Indels
                                                                                                           /note= "2'methoxyethyl nucleotides"
                                                note = "2'methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PLA2 antisense oligonucleotide, ISIS 128020.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                   Example 15; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 854 GICCIGGCICCAGIIGGAAC 873
                              /mod_base= OTHER
                                                                                           /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Greerescreeningaac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                    28-OCT-2002; 2002WO-US034654.
                                                                                                                                                                                                                                01-NOV-2001; 2001US-00016149.
 1. .5
/*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC82848 standard; DNA; 20
                                                                              U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                           16. .20
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag=
                                                                                                                                                                                                                                                                                               Wyatt JR;
                                                                                                                                                                                                                                                                                                                          WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                        WO2003038050-A2
modified_base
                                                         modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                                                               Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC82848;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC82848,
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
```

; 0

5

```
PLA2 DNA, This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA265, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence is an antisense oligonucleotide tragetted to human the present sequence of the present seq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothioate backbone; ss.
note= "Phosphorothioate backbone; All cytidines are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 20; DB 1; Length 20; Pred. No. 29; 0; Indels
                                                                                                                                                                                                                                                  /*tag= c
/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                         /*tag= b
/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human PLA2 antisense oligonucleotide, ISIS 128027.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   930 ACCCTCCAGAGAATTTTACG 949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Accerccadadarrirace 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 3; Page 75; 99pp; English.
                                       methylcytidines
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.9%; S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-OCT-2002; 2002WO-US034654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC82855 standard; DNA;
                                                                                                                                                                                                              16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bennett CF, Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                            WO2003038050-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Key
modified_base
                                                                               modified base
                                                                                                                                                                                                                     modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC82855;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC82855/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 16
              q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REPERT OF STATE OF ST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA3CS, NVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophlass, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothicate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                   /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                            /*tag= c
/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human PLA2 antisense oligonucleotide, ISIS 128039.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%; Pred .v.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 15; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    710 AGTCCCAGGAGAGTGACTCT 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20 AGTCCCAGGAGAGTGACTCT 1
                     methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-OCT-2002; 2002WO-US034654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-NOV-2001; 2001US-00016149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACC82867 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 100.
Matches 20; Conservative
                                                                                          Д
                                                                                                                                                                                        .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1. .20
/*tag=
                                                      .5
/*tag=
od '
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                      WO2003038050-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
modified base
                                                             modified base
                                                                                                                                                                                                modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC82867;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bennett
```

ACC82867/c

RESULT 15

à g Homo

0

```
ACC82857 standard; DNA; 20
                                                                      (ISIS-) ISIS PHARM INC
                                                                             Bennett CF, Wyatt JR;
                                                                                    WPI; 2003-430513/40.
                                                                                                                                                           Query Match
Best Local Similarity
Matches 20; Conserv
                                          WO2003038050-A2
                        modified base
           modified base
                                                                                                                                                                                                                                                       Key
modified_base
                                                                                                                                                                                                                                             Homo sapiens
                                                 08-MAY-2003
                                                                                                                                                                                                                 27-AUG-2003
                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                           792
                                                                                                                                                                                 20
                                                                                                                                                                                                           ACC82857;
                                                                                                                                                                                                ACC82857/c
                                                                                               gene
                                                                                                                                                                                            RESULT 17
à
                                                                                                                                                                                g
```

```
The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                          /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, phospholipase A2; PLA2; calcium dependent phospholipase A2;
PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 20; DB 1; Length 20;
Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Indels
                                                                                                                           /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
                                                                                                                                                                                                                              'note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human PLA2 antisense oligonucleotide, ISIS 128040.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 5 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6.9%; Scor.
100.0%; Pred. No. 2.,
... 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 15; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                    /*tag= c
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    808 CICCAACICAGGGIIGGCIG 827
                                                                 methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTCCAACTCAGGGTTGGCTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC82868 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                               28-OCT-2002; 2002WO-US034654;
                                                                                                                                                                                                                                                                                                                                                                                      01-NOV-2001; 2001US-00016149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20; Conservative
                                                                                                      *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                 WO2003038050-A2
                                                                                  modified base
                                                                                                                                                                modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bennett CF,
                                                                                                                                                                                                                                                                                                        08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC82868;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 18
ACC82868/
        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calciuw dependent phospholipase A2, PLA2G5, hVPLA2 and HFLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for diadnostics, therapeutics, prophlaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targeted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 antisense oligonucleotides for modulating phospholipase A2 group V expression, particularly useful for treating an autoimmune disorder
                /note= "Phosphorothioate backbone; All cytidines are
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6.9%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                               /note= "2'methoxyethyl nucleotides'
                                                                                                                 'note= "2'methoxyethyl nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PLA2 antisense oligonucleotide, ISIS 128029.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.08; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGTGCCAAGAGCTCTCCTCC 811
                                                                          /*tag= b
/mod_base= OTHER
mod_base= OTHER
                                                                                                                                                                          /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GGTGCCAAGAGCTCTCCTCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New antisense oligonucleotides
                                                                                                                                                                                                                                                                                                                28-OCT-2002; 2002WO-US034654.
                                                                                                                                                                                                                                                                                                                                                     01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or an inflammatory disorder.
                                                                                                                                                          υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                 16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                        /*tag=
```

o,

Gaps

·.

```
The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2. PLA2GS, NPDLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New antisense oligonucleotides for modulating phospholipase A2 group {\rm V} gene expression, particularly useful for treating an autoimmune disorder
                                                               //note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothloate backbone; ss.
                                                                                                                                 /*tag= b
/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                             /note= "2'methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human PLA2 antisense oligonucleotide, ISIS 128025
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 3 A; 5 C; 9 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.0%; Preu. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 15; Page 75; 99pp; English.
location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGGGTCCCTAGGCCTCCAC 772
                                                                                                                                                                                                         /*tag= c
/mod_base= OTHER
                                                       OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGGGTCCCTAGGCCTCCAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                                                                                                 28-OCT-2002; 2002WO-US034654
                                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-2001; 2001US-00016149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                       mod_base=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20; Conservative
                                                                                                                                                                                       16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC82853 standard; DNA;
                                     *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                       WO2003038050-A2
   Key
modified_base
                                                                                                                                                                                         modified base
                                                                                                               modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-AUG-2003
                                                                                                                                                                                                                                                                                                                             08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACC82853;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bennett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC82853/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2GS, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder
                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                           /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 20; DB 1; Length 20; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                               /*tag= c
/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                 /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human PLA2 antisense oligonucleotide, ISIS 128023.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 8 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6.9%; Scc.
100.0%; Pre
0; }
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCTAAATCTGGTGTATGG 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Н
                                                                                 methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 3; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rereraareregrerares
                                                                                                                                                                                                                                                                                                                                                                                           01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                                                                       28-OCT-2002; 2002WO-US034654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACC82851 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                       /*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                             .20
                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                           *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                           WO2003038050-A2
                                                                                                       modified base
                                                                                                                                                                                 modified base
       modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-AUG-2003
```

Bennett CF,

08-MAY-2003

·.

Gaps

; 0

DB 1; Length 20; 29; 0; Indels

Homo sapiens

Homo sapiens

ACC82851;

ACC82851/c RESULT 19

696 20

ð 요 Synthetic.

Synthetic.

/note= "Phosphorothioate backbone; All cytidines are methylcytidines"

Location/Qualifiers /*tag= a /mod_base= OTHER

Key modified_base

Synthetic.

```
The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                              /note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                           /*tag= b
/mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                           note= "2'methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 6 C; 7 G; 3 T; 0 U; 0 Other;
                   Location/Qualifiers
                                                                'mod base= OTHER
                                                                                                                                                                                                         /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 3; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                    28-OCT-2002; 2002WO-US034654.
                                                                                                                                                                                                                                                                                                                                                     01-NOV-2001; 2001US-00016149
                                                   ø
                                                                                                                                                                                             υ
                                                                                                                                                                      16. .20
/*tag= c
                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                 *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-430513/40.
                                                                                                                                                                                                                                                        WO2003038050-A2
                Key
modified base
                                                                                                             modified base
                                                                                                                                                                         modified base
                                                                                                                                                                                                                                                                                                                                                                                                                   Bennett CF,
```

```
ö
                         Gaps
                         ;
0
 Score 20; DB 1; Length 20;
Pred. No. 29;
                         0; Indels
                      0; Mismatches
                                            763 AGGCCTCCACTTCTGAGGGC 782
6.9%;
100.0%;
                      Conservative
Query Match
Best Local Similarity
                     20;
            Best Loca
Matches
```

AGGCCTCCACTTCTGAGGG 1 20

Human PLA2 antisense oligonucleotide, ISIS 128036. ACC82864/c ID ACC82864 standard; DNA; 20 27-AUG-2003 (first entry) ACC82864; RESULT 21 

Human, phospholipase A2, PLA2, calcium dependent phospholipase A2, PLA2G5; hVPLA2, HPLA2-10, therapy, autoimmune disorder, prophylaxis, inflammatory disorder, antisense; phosphorothioate backbone; ss.

Homo sapiens

ö The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder. Gaps Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothicate backbone; ss. .; 0 6.9%; Score 20; DB 1; Length 20; 100.0%; Pred. No. 29; 0; Indels /not $\overline{\mathbf{e}}$ = "2'methoxyethyl nucleotides" 16. .20  $not\overline{e} = "2'methoxyethyl nucleotides"$ Human PLA2 antisense oligonucleotide, ISIS 128031. Sequence 20 BP; 7 A; 3 C; 6 G; 4 T; 0 U; 0 Other; 100.0%; Preq. ... 1. .5 /*tag= b /mod_base= OTHER 878 TCCTGAGATGCACTTACTTC 897 mod_base= OTHER Claim 3; Page 75; 99pp; English. TCCTGAGATGCACTTACTTC 1 2002WO-US034654. 01-NOV-2001; 2001US-00016149. ACC82859 standard; DNA; 20 BP υ (first entry) Local Similaricy hes 20; Conservative *tag= (ISIS-) ISIS PHARM INC Wyatt JR; WPI; 2003-430513/40. WO2003038050-A2 modified_base modified base 28-OCT-2002; Bennett CF, 27-AUG-2003 08-MAY-2003 ACC82859; 20 Query Match Matches ACC82859/ SS X X B B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X ð 셤 

Synthetic.

```
The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA265, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oilgonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New antisense oligonucleotides for modulating phospholipase A2 group {\rm V} gene expression, particularly useful for treating an autoimmune disorder
                                                                                                                                       /note= "Phosphorothioate backbone; All cytidines are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1; Length 20; 29;
                                                                                                                                                                                                                                          /note= "2'methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human PLA2 antisense oligonucleotide, ISIS 128022.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 5 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.9%; buc.
100.0%; Pred. No. ...
                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  871 AACACTTTCCTGAGATGCAC 890
                                                                                                                                                                                                                          /mod_base= OTHER
                                                                                                                               /mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 3; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACACTTTCCTGAGATGCAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                                                                                                                                                            28-OCT-2002; 2002WO-US034654.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC82850 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                               ಗ
                                                                                                                                                                                                          Д
                                                                                                                                                                                                                                                                                      บ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                16. .20
                                                                                                                                                                                                          /*tag=
                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                      /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bennett CF, Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                               WO2003038050-A2
                                                                      Key
modified_base
                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                                                  modified base
                Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                      08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 24
ACC82850/c
q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPHA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V, the antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder
                                                                                                                                   'note == "Phosphorothioate backbone; All cytidines are 5-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6.9%; Score 20; DB 1; Length 20;
100.0%; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                             /note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                              /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PLA2 antisense oligonucleotide, ISIS 128035.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 6 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                      location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        837 TCTTCTCTGAAGACAGCGTC 856
                                                                                                               mod_base= OTHER
                                                                                                                                                       methylcytidines"
                                                                                                                                                                                                                                                                                          base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 3; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                28-OCT-2002; 2002WO-US034654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-2001; 2001US-00016149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC82863 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                   ಗ
                                                                                                                                                                                                                                                                          υ
                                                                                                                                                                                             *tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                    .20
                                                                                                                                                                                                                                                                          /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                            20
                                                                                                   *tag=
                                                                                                                                                                                                                                                                                          /mod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                   WO2003038050-A2
                                                          Key
modified_base
                                                                                                                                                                                                                                                      modified base
                                                                                                                                                                           modified base
  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-AUG-2003
```

Bennett CF,

. 0

Gaps

; 0

0; Indels

ACC82863;

ACC82863/c

20

à g

```
·
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                 /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are 5-
methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
 inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 20; DB 1; Length 20; Pred. No. 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                             /note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                     /note= "2'methoxyethyl nucleotides"
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PLA2 antisense oligonucleotide, ISIS 128026.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 6 A; 8 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 15; Page 75; 99pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       731 GTCATAGGACTTGGTAGGGT 750
                                                                                                                                                                      /*tag= b
/mod_base= OTHER
                                                                                                                                                                                                                                               /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100.08; PIE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Grcaraggactregragger 1
                                                                                                                                                                                                                                                                                                                                             28-OCT-2002; 2002WO-US034654.
                                                                                                                                                                                                                                                                                                                                                                         01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC82854 standard; DNA; 20
                                                                                                                                                                                                                                  บ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                  /*tag=
                                                                                      .20
                                                                                                                                                                                                                                *tag=
                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                Bennett CF, Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                      WO2003038050-A2
                                                                       Key
modified_base
                                                                                                                                                          modified base
                                                                                                                                                                                                                modified base
                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-AUG-2003
                                                                                                                                                                                                                                                                                                                 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20;
                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC82854;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC82854/c
MX B X B X B X B X B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder
                                                                                                                                                 5
                                                                                                                                           note= "Phosphorothioate backbone; All cytidines are
PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6.9%; Score 20; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                    /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
                                                                                                                                                                                                                                                                          'note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human PLA2 antisense oligonucleotide, ISIS 128028.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%; Preα. ...
rive 0; Mismatches
                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 15; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     786 CCCTCTGGTGCCAAGAGCTC 805
                                                                                                                                 mod base= OTHER
                                                                                                                                                                                                                                              /*tag= c
/mod_base= OTHER
                                                                                                                                                             methylcytidines
                                                                                                                                                                                                                                                                                                                                                                                       01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccercregreccaagacre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC82856 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                            28-OCT-2002; 2002WO-US034654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    or an inflammatory disorder.
                                                                                                                                                                                       *tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                     ...20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                               Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
les 20; Conserv
                                                                                                                                                                                                                                                                                                   WO2003038050-A2
                                                                                                modified base
                                                                                                                                                                         modified base
                                                                                                                                                                                                                                modified base
                                            Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Bennett CF,
                                                                                                                                                                                                                                                                                                                                 08-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC82856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                      Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC82856/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        XEXEXEX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
```

```
·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                           /note= "Phosphorothioate backbone; All cytidines are methylcytidines"
Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6.9%; Score 20; DB 1; Length 20; 00.0%; Pred. No. 29; ve 0; Mismatches 0; Indels
                                                                                                                                                                                                                 /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
16. .20
                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human PLA2 antisense oligonucleotide, ISIS 128018.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 6 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.08; PIE
                                                                                                                                                mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 3; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             804 TCTCCTCCAACTCAGGGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20 rerecreeaereaesrie
                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-2001; 2001US-00016149.
                                                                                                                                                                                                                                                                                                                                                                                       28-OCT-2002; 2002WO-US034654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACC82844 standard; DNA; 20
                                                                                                                                                                                                                                                                     υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.
                                                                                                                                     ಹ
                                                                                                                                                                                                          *tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                     /*tag=
                                                                                                                                    *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                              WO2003038050-A2
                                                                                                          Key
modified_base
                                                                                                                                                                                                                                                     modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-AUG-2003
                                                                                                                                                                                             modified_base
                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bennett CF,
                                                                                                                                                                                                                                                                                                                                                         08-MAY-2003
                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACC82844;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC82844/c
      BXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          q
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA265, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder.
                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                              /mod_base= OTHER
/note= "Phosphorothioate backbone; All cytidines are
       Human; phospholipase A2; PLA2; calcium dependent phospholipase A2; PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis; inflammatory disorder; antisense; phosphorothicate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6.6%; Score 19; DB 1; Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                       /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                             /mod_base= OTHER
/note= "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      No.
                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                            methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 3; Page 75; 99pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 703 TCCAGCGAGTCCCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                      28-OCT-2002; 2002WO-US034654
                                                                                                                                                                                                                                                                                                                                                                                                01-NOV-2001; 2001US-00016149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                     æ
                                                                                                                                                                                                                                                           U
                                                                                                                                                                                                      /*tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                          16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACC82846 standard; DNA;
                                                                                                                       1. .20
/*tag=
                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bennett CF, Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-430513/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                 WO2003038050-A2
                                                                                                          Key
modified_base
                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                                                                                                                             SISI (-SISI)
                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-AUG-2003
                                                                                                                                                                                                                                                                                                                                            08-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19;
                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC82846;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACC82846/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2X2X5X
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
```

Human PLA2 antisense oligonucleotide, ISIS 128018

EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; cross-species comparison.

Human microarray DNA oligonucleotide SEQ ID NO 83917.

```
Human; phospholipase A2; PLA2; calcium dependent phospholipase A2;
PLA2G5; hVPLA2; HPLA2-10; therapy; autoimmune disorder; prophylaxis;
inflammatory disorder; antisense; phosphorothioate backbone; ss.
                                                                                                                                                               28-OCT-2002; 2002WO-US034654
                                                                                                                                                                           01-NOV-2001; 2001US-00016149
                                                                                                                                                                                      (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                  Wyatt JR;
                                                                                                                                                                                                             WPI; 2003-430513/40.
                                                                                                                                         WO2003038050-A2
                                                   Key
modified_base
                                                                                     modified base
                                                                                                            modified base
                                   Homo sapiens.
                                                                                                                                                                                                 Bennett CF,
                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                    Query Match
```

New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the

sequence or specific mutations of any gene.

16-MAR-2001; 2001US-0276759P. 15-MAR-2002; 2002US-00098263.

US2003104410-A1.

05-JUN-2003

/mod_base= OTHER /note= "Phosphorothioate backbone; All cytidines are 5-

methylcytidines" /*tag= b /mod_base= OTHER

Location/Qualifiers

æ

/*tag=

(AFFY-) AFFYMETRIX INC

WPI; 2003-567953/53.

/note= "2'methoxyethyl nucleotides"

/mod base= OTHER

U

/*tag=

/note= "2'methoxyethyl nucleotides'

Mittmann MP;

Claim 1; SEQ ID NO 83917; 9pp; English.

.; 0 The invention relates to antisense compounds, compositions and methods for modulating phospholipase A2 (PLA2) group V gene expression. PLA2 is also known as calcium dependent phospholipase A2, PLA2G5, hVPLA2 and HPLA2-10. The antisense oligonucleotide is useful for treating an animal having a disease or conditions associated with PLA2 group V, e.g. an autoimmune disorder or an inflammatory disorder. It is also useful for modulating PLA2 group V. The antisense compounds are also useful for diagnostics, therapeutics, prophylaxis, or as research reagents or kits. The present sequence is an antisense oligonucleotide targetted to human PLA2 DNA. This sequence is used to illustrate the method of the invention New antisense oligonucleotides for modulating phospholipase A2 group V gene expression, particularly useful for treating an autoimmune disorder or an inflammatory disorder. Gaps · 0 Score 19; DB 1; Length 20; Indels Sequence 20 BP; 2 A; 6 C; 7 G; 5 T; 0 U; 0 Other; 44; Mismatches 100.08; FI Claim 3; Page 75; 99pp; English. 6.68; Conservative Best_Local Similarity Matches 19; Conserv

```
₽
               g
             721
                            TCCAGCGAGTCCCAGGAGA 1
            703 TCCAGCGAGTCCCAGGAGA
```

25

ACI83926 standard; DNA;

ACI83926

8

ACI83926;

14-OCT-2003 (first entry)

```
The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in manitoring gene expression levels by hybridisation to a DNA library, compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises hybridising at least one or more nucleic acids to at least two or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dother hybridisation to identify or detect the sequence or specific mittations of any gene, in mapping the 5' termin of mittations of any gene, in mapping the 5' termin of mittations of any gene, in mapping the 5' termin of mittations of any gene, in mapping the 5' termin of mittations of any gene, in mapping the 5' termin of mittations of any gene, in mapping the 5' termin of propers and propers and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    primer extensions or in screening CDNA or genomic libraries or subclones for additional subclones containing segments of DNA that have been isolated and previously sequenced. The sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly from USPTO at sequence.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6.1%; Score 17.6; DB 1; Length 25; 33.3%; Pred. No. 1.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human microarray DNA oligonucleotide SEQ ID NO 24812.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 25 BP; 4 A; 9 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   831 CTCTTTTCTCTGAAGACAGCG 854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCTTCTCTCTCAGAGACCTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACI24821 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
les 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACI24821;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACI24821
BXXXXX
```

```
EST; ss; probe; expressed sequence tag; microarray; gene genetic variation; biallelic marker; polymorphism; human;
                                                          16-MAR-2001; 2001US-0276759P.
                                                 15-MAR-2002; 2002US-00098263.
            cross-species comparison.
                                                                   (AFFY-) AFFYMETRIX INC.
                               US2003104410-A1
                      Homo sapiens.
                                                                            Mittmann MP;
                                        05-JUN-2003
```

```
The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismacch.

Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, or analysis of genetic variation or in hybridisation to a DNA library, or at least one target sequence. The method of analysis comprises of at least one or more nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, cor family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence or specific comparison. Both by thy distance or in servening cDNA or genomic libraries or subclones contact the sequence presented is one of the nucleic acid probes incorporated in the microarray. Note: The sequence or general patent can also be obtained in electronic format directly format directly and a patent can also be obtained in a lectronic format directly and a patent can also be obtained in an electronic format directly and an analysis of the sequence.
                                                                                                                    New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            from USPTO at seqdata.uspto.goc/sequence.html
                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 24812; 9pp; English.
WPI; 2003-567953/53.
```

```
Gaps
                                                                        .
0
                                 Ouery Match 6.1%; Score 17.6; DB 1; Length 25; Best Local Similarity 83.3%; Pred. No. 1.1e+02;
                                                                      4; Indels
Sequence 25 BP; 6 A; 8 C; 4 G; 7 T; 0 U; 0 Other;
                                                                        0; Mismatches
                                                                          Conservative
                                                                        20;
                                                                            Matches
```

ö

```
829 GICTCTTTCTTCTGAAGACAG 852
                                                    grererarieereacidaadaced 25
```

ò g

1283/c AAA58283 standard; DNA; 24 AAA58283; RESULT 31 AAA58283/ 

Dirofilaria immitis ankyrin gene PCR primer, SEQ ID NO:152

23-OCT-2000 (first entry)

Ankyrin; parasitic helminth; filariid nematode; heartworm disease;

```
elephantiasis; hydrocele; vaccine; antibody; antihelmintic; PCR primer;
```

Dirofilaria immitis.

expression;

US6063599-A.

16-MAY-2000 

98US-00065474. 24-APR-1998;

97US-00847429 24-APR-1997;

(HESK-) HESKA CORP.

Tang L; Blehm ES, WPI; 2000-375493/32.

New Dirofilaria and Brugia ankyrin proteins and nucleic acid encoding them, useful for treating and protecting animals from diseases caused by parasitic helminths, e.g. heartworm disease, elephantiasis or hydrocele.

Example 10; Col 46; 120pp; English.

The invention relates to ankyrin proteins and nucleac actus from the parasitic helminths Dirofilaria immitis and Brugia malayi. It also relates to antibodies raised against such ankyrin proteins and to relates to antibodies raised against such ankyrin proteins and to compounds that inhibit Dirofilaria or Brugia ankyrin function.

CC Dirofilaria ankyrin cDNAs were isolated from a D. immitis 48 hour L3 CDNA library using PCR primers based on the sequence of the E1 ankyrin from Onchocerca volvulus and the Caenorhabditis elegans ankyrin UNC-44 genes.

CC Interpretation of Brugia ankyrin proteins and nucleic acids represent novel interpretation or Brugia ankyrin proteins and drugs. Ankyrin nucleic acid molecules, proteins, vaccines and drugs. Ankyrin nucleic acid molecules, proteins, vaccines and drugs ankyrin nucleic acid molecules, proteins, vaccines and compositions are useful for protecting animals, particularly dogs, from diseases caused by parasitic helminths (e.g., heartworm diseases, elephantiasis or hydrocele, as well as for treating the infection. The ankyrin nucleic acid molecules, proteins, vaccines and compositions of the invention are especially useful in treating and preventing infections caused filarid mematodes (e.g., D. immitis and B. malayi), and ascarid, capillarid, strongyloides, trichostrongyle, or trichurid nematodes and are also useful against cestodes and trematodes. The therapeutic compositions may borses, cattle, sheep, and other pets, economic food animals; or zoo animals. The ankyrin nucleic acid molecules, proteins and composition of enimals. The ankyrin nucleic acid molecules, proteins and compounds may also be used as diagnostic reagents to detect infection by parasitic compounds cause harmful side effects in the individual being treated, and a number combanist and the parameter of these drugs can only treat the symptoms of a parasitic disease, being end in any ankyrin profein and an animities and B. malayi ankyrin profein and bear and an animities and an animities and an animities an of the The invention relates to ankyrin proteins and nucleic acids from the

immitis and B. malayi ankyrin protein and DNA sequences facilitates the development of agents which inhibit ankyrin-mediated parasite developmental and migratory pathways. Sequences AAAS8201-A58219 and AAAS8278-A58291 represent PCK primers used in the exemplifications of thinvention to isolate D. immitis and B. malaya ankyrin cDNAs

Sequence 24 BP; 9 A; 5 C; 6 G; 4 T; 0 U; 0 Other;

.<u>.</u> 5.9%; Score 17.2; DB 1; Length 24; 36.4%; Pred. No. 1.2e+02; ve 0; Mismatches 3; Indels 905 CTGCGATCAGATTATCATCACC 926 ilarity 86.4%; Conservative Similarity 19; Query Match Local Matches ð

cigrearcrearrarcreace 1

22

g

. 0

Gaps

RESULT 32

```
Anti-parasitic; immunogenic; Dirofilaria; Brugia ankyrin protein; parasitic helminth infection; heartworm disease; elephantitis; hydrocele;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New ankyrin proteins encoded by nucleic acids which hybridize to nucleic acids from Dirofilaria and Brugia are useful to immunize against platyhelminth parasites which cause disease such as heartworm, elephantitis and hydrocele.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a Dirofilaria or Brugia ankyrin protein encoded by a nucleic acid which hybridises to one of 30 59-5503 nucleotide sequences, all given in the specification under conditions of 2xSSC (saline sodium citrate) and 0 % formamide hybridisation, 1xSSC and 0 % formamide wash. The proteins are used to prevent parasitic helminth infections which cause diseases such as heartworm disease, elephantitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                and hydrocele. This polynucleotide sequence represents an ankyrin PCR primer relating to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 24 BP; 9 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                 Ankyrin cDNA related PCR primer SEQ ID No 152.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Col 45; 119pp; English.
```

Gaps ; 0 5.9%; Score 17.2; DB 1; Length 24; 16.4%; Pred. No. 1.2e+02; ve 0; Mismatches 3; Indels 905 CTGCGATCAGATTATCATCACC 926 Crerearcrearrarcricace 1 86.4%; Local Similarity 86.4 les 19; Conservative 22 Query Match Best Loca Matches à

.; 0

·:

ACK10597 standard; DNA; 25 (first entry) 14-OCT-2003 ACK10597; RESULT 33 ACK10597 

Human microarray DNA oligonucleotide SEQ ID NO 110578.

Tissue repair protein; orofacial clefting; wound healing; tissue repair;

region; ss

2q breakpoint Homo sapiens.

WO200040719-A2

13-JUL-2000.

Oligonucleotide used for analysis and study of 2q breakpoint region.

(first entry)

20-0CT-2000

AAA58827;

ВР

AAA58827 standard; DNA; 25

RESULT 34 AAA58827

> EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human; cross-species comparison.

Homo sapiens

```
The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its conformatch, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by hybridisation to a DNA library, compounds. The nucleic acid probes are specifically designed for analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises the nucleic acid probes and detecting the hybridisation. The nucleic acid probes and detecting the hybridisation. The nucleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, comparisons lead to a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence. The array of nucleic acid containing the 5' termini of mRNA molecules by primer extensions of any gene, in mapping the 5' termini of mRNA molecules by containing segments of but hybridisation, in sequence presented is one of the isolated and previously sequenced. The sequence presented is one of the contained and previously sequenced. The sequence presented is one of the contained and previously sequenced. The sequence presented is one of the contained and previously sequenced. The sequence presented is one of the contained and previously sequenced in the microarray. Note: The sequence of the form uspro at sequence of the contained in electronic format directly format directly then the contained in the microarray.
                                                                                                                                                                                                                                                                                                                                                     in situ hybridization, in
to identify or detect the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.9%; Score 17; DB 1; Length 25; 80.0%; Pred. No. 1.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 25 BP; 9 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                               New array of nucleic acid probes, useful for Southern, Northern or dot-blot hybridization sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 110578; 9pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          917 TATCATCACCACCCTCCAGAGA 941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTCATCATAACACCTTCCAGAGA 25
                                                                                                                                               16-MAR-2001; 2001US-0276759P.
                                                                                                15-MAR-2002; 2002US-00098263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20; Conservative
                                                                                                                                                                                                   (AFFY-) AFFYMETRIX INC
                                                                                                                                                                                                                                                                                                 WPI; 2003-567953/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
US2003104410-A1.
                                              05-JUN-2003
                                                                                                                                                                                                                                                    Mittmann MP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q
```

Mon Jul 12 11:21:14 2004

```
RESULT 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABZ21820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                           Oligonucleotides AAAS8825-58 were used in the analysis and study of the 2q breakpoint region, in the course of the invention to identify the gene encoding a tissue repair protein. Tissue repair gene polynucleotides are useful for determining expression of mRNA in selected target tissue, e.g. for diagnosing and treating orofacial clefting. They are also useful for determining the presence of DNA mutations in patients suffering from, or suspected to be suffering from orofacial clefting. The antibodies are also useful in the diagnosis of orofacial clefting. The polynucleotide is also useful for promoting wound healing and tissue repair
                                                                                                                                                                                                                                           New human and mouse nucleic acids encoding a tissue repair protein, useful for diagnosing and treating orofacial clefting, and for promoting wound healing and/or tissue repair.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST; ss; probe; expressed sequence tag; microarray; gene expression; genetic variation; biallelic marker; polymorphism; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.8%; Score 16.8; DB 1; Length 25; 90.0%; Pred. No. 1.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human microarray DNA oligonucleotide SEQ ID NO 23624.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 25 BP; 10 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 23624; 9pp; English.
                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 43; 45pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          950 CAAGAAGAGCCAAATTGACT 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 caacacaccararreacr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-MAR-2001; 2001US-0276759P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-MAR-2002; 2002US-00098263.
                         06-JAN-2000; 2000WO-GB000003
                                                                99GB-00000167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACI23633 standard; DNA; 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cross-species comparison.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 90.0
Matches 18; Conservative
                                                                                                                                                        Bonthron D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-567953/53.
                                                                                                                                                                                                    WPI; 2000-465983/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003104410-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                   06-JAN-1999;
                                                                                                               (UYLE-) UNIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mittmann MP;
                                                                                                                                                        Markham AF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACI23633;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACI23633/
    XX AAC XXX AAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
```

```
The invention discloses a microarray comprising a plurality of mucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch.

Also disclosed is a method of gene expression analysis. The array is used in monitoring gene expression levels by Mybridisation to a DNA library, in analysis of genetic variation or in hybridisation of taq-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises bybridising at least one or more nucleic acids to at least two or more uncleic acid probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid further comprises a tag sequence or specific or probes is useful in in situ hybridisation, in Southern, Northern or dottor hybridisation to identify or detect the sequence or specific or mutations of any gene, in mapping the 5' termini of mRNA molecules by comparisons of any gene, in mapping the 5' termini of mRNA molecules by comparisons of any gene, in mapping the 5' termini of mRNA molecules by committed and previously sequenced. The sequence or specific or uncleic acid probes incorporated in the microarray. Note: The sequence data for this patent can also be obtained in electronic format directly to the manaly sequence or the contract of the sequence or specific or the manaly sequence or the contract of the sequence or specific or sold probes incorporated in the microarray. Note: The sequence or specific or sold probes incorporated in the microarray. Note: The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           permeability transition pore complex; virucide; neuroprotective; vasotropic; cytostatic; infection; cell death regulation; apoptosis; mitochondrial permeability transition pore complex modulator; cancer; apoptogenic; ischaemia; neurodegenerative disease; fulminant hepatitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mitochondrial membrane permeabilisation; mitochondrion; PTPC; chimeric;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New chimeric bifunctional molecules that target specific cells and regulate the apoptosis function of the permeability transition pore complex of the mitochondria, useful for treating or preventing e.g.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Recombinant transfer vector pVL-PS-gp671 related primer Th1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.8%; Score 16.8; DB 1; Length 25; 30.0%; Pred. No. 1.5e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 25 BP; 5 A; 10 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     735 TAGGACTTGGTAGGGTCCCA 754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Briand J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21 TAGGACTTGGTGGGGACCCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-FEB-2001; 2001US-0265594P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-FEB-2002; 2002WO-EP001633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    90.06;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABZ21820 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (CNRS ) CENT NAT RECH SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 90.0
Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jacotot E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (INSP ) INST PASTEUR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-619260/66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200261105-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Edelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABZ21820;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
```

```
The present invention describes a chimeric bifunctional molecule (I)

comprising at least a first functional molecule covalently linked to a

second functional molecule, which is able to modulate the activity of the

permeability transition pore complex (PTPC) of the mitochondria. (I) has

the function of specifically targeting and entering a tissue cell

specifically targeting, and inducional molecule has the function of

specifically targeting, and inducion or tree chosing of the PTPC of the

mitochondria or its fragment. (I) has virucide, neuroprotective,

vasotropic and cytostatic activities, and can be used as a mitochondrial

permeability transition pore complex (PTPC) modulator. (I) is useful for

treating or preventing a pathological infection or disease. (I) is also

cuseful for regulating cell death regulatory molecules, specifically the

apoptogenic function of the PTPC, for treating e.g. cancer, ischaemia,

consorted the consorted and pathological infections or viral infections. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present sequence represents a primer which is used in an example from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 23 BP; 7 A; 12 C; 1 G; 3 T; 0 U; 0 Other;
                                                      Example 2; Page 30; 76pp; English
cancer or ischemia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention
```

5.7%; Score 16.6; DB 1; Length 23; 82.6%; Pred. No. 1.4e+02; Live 0; Mismatches 4; Indels 909 GAICAGAITAICAICACCACCAC 931 19; Conservative Local Similarity Query Match Matches ਨੇ

1 GATCCCATCATCACCACCACCAC 23 RESULT 37 셤

ACI71755 standard; DNA; 25 BP ACI71755; ACI71755 

(first entry) 14-OCT-2003

Human microarray DNA oligonucleotide SEQ ID NO 71746.

ss; probe; expressed sequence tag; microarray; gene expression; tic variation; biallelic marker; polymorphism; human; cross-species comparison. qenetic

Homo sapiens

US2003104410-A1.

05-JUN-2003

15-MAR-2002; 2002US-00098263

16-MAR-2001; 2001US-0276759P.

(AFFY-) AFFYMETRIX INC

Mittmann MP;

WPI; 2003-567953/53.

New array of nucleic acid probes, useful for in situ hybridization, in Southern, Northern or dot-blot hybridization to identify or detect the sequence or specific mutations of any gene.

Claim 1; SEQ ID NO 71746; 9pp; English.

The invention discloses a microarray comprising a plurality of nucleic acid probes including one of 2,018,500 fully defined sequences, or its perfect match, perfect mismatch, antisense match or antisense mismatch. Also disclosed is a method of gene expression analysis. The array is used

in monitoring gene expression levels by hybridisation to a DNA library, an analysis of genetic variation or in hybridisation of tag-labelled compounds. The nucleic acid probes are specifically designed for analysis of at least one target sequence. The method of analysis comprises of at least one target sequence. The method of analysis comprises worked probes are attached to a solid support. The analysis comprises monitoring probes are attached to a solid support. The analysis comprises monitoring gene expression levels, identifying biallelic markers or polymorphisms, or family members of a gene and a cross-species comparison. Each of the nucleic acids further comprises a tag sequence. The array of nucleic acid probes is useful in in situ hybridisation, in Southern, Northern or dotuce or probes is useful in in situ hybridisation, in Southern, Northern or dotuce of any gene, in mapping the 5' termini of mRNA molecules by primer extensions or in screening Segments of DNA that have been candational subclones containing segments of DNA that have been call solutions between the microarray. Note: The sequence of the from HOPPIN at an also be obtained in electronic format directly from USPTO at segdata.uspto.goc/sequence.html 

Sequence 25 BP; 4 A; 8 C; 6 G; 7 T; 0 U; 0 Other;

Gaps 0 / Match 5.7%; Score 16.6; DB 1; Length 25; Local Similarity 82.6%; Pred. No. 1.6e+02; nes 19; Conservative 0; Mismatches 4; Indels Query Match Matches Best

0:

967 ACTCTCTAAATCTGGTGTATGGG 989 1 Acreceracerereserarese 23 à qq

. 0

Gaps

. 0

RESULT 38

BP ABZ76989 standard; DNA; 19

ABZ76989;

(first entry) 07-MAY-2003

Bovine DGAT PCR primer #25.

Acyl CoA:diacylglycerol transferase; DGAT; enzyme; chromosome 14; bovine; milk; meat marbling; low fat; polymorphic; SNP; single nucleotide polymorphism; PCR primer; ss. 

Bos taurus.

Synthetic.

WO2003004630-A2.

16-JAN-2003.

05-JUL-2002; 2002WO-EP007520

06-JUL-2001; 2001EP-00116412

13-MAY-2002; 2002US-0379412P.

(ARBE-) ARBEITSGEMEINSCHAFT DEUT RINDERZUECHTER.

Fries H, Winter A;

WPI; 2003-239205/23

New nucleic acid molecule comprising a sequence of an allele of a polymorphic bovine acyl CoA-diacylglycerol transferase gene useful for testing a mammal for its predisposition for fat content of milk and for

Example 1; Page 36; 91pp; English.

meat marbling

encoding The present invention describes a nucleic acid molecule (NA) (I) encodi a bovine acyl CoA-diacylglycerol transferase (DCAT) contributing to or indicative for low fat content of milk and to low meat marbling

```
(intramuscular fat content). Human DGAT is located to chromosome 8, and bounce DGAT is located to chromosome 14. (I) is useful for testing a mammal for its predisposition for fat content of milk and/or its predisposition for meat marbling. The method comprises analysing the gene encoding DGAT for nucleotide polymorphisms (e.g. single nucleotide polymorphisms are located in the coding region of the DGAT gene and result in substitution, deletion and/or addition of an amino acid sequence of the polymeptide which is encoded by the gene. The mucleic acid molecule has at the position 1043 and 10434 of the DGAT gene a quanine and a cytosine residue, at position 3343 as cytosine or quanine, and low act a predisposition for low fat content of milk and low meat marbling. The nucleic acid molecule has at the position corresponding to position 10433 and 10434 of the DGAT cresidues which correlate with a predisposition for high content of milk and high meat marbling. The nucleic acid molecule has at the position corresponding to position 10433 and 10434 of the DGAT gene two adenine residues which is responsible for the regulation of the expression of the present sequences used in the exemplification of the present
```

Sequence 19 BP; 3 A; 4 C; 9 G; 3 T; 0 U; 0 Other;

0 Gaps 0; Score 16.4; DB 1; Length 19; Pred. No. 1.2e+02; Indels 0; Mismatches 743 GGTAGGGTCCCAGGGTCC 760 18 5.7%; Query Match 5.7%; Best Local Similarity 94.4%; Matches 17; Conservative 1 GGTAGGGTCCCAGGGTAC dd ð

RESULT 39 ABZ76950

ABZ76950 standard; DNA; 19 BP (first entry) 07-MAY-2003 ABZ76950; 

Bovine DGAT BAC-DNA sequencing primer #23.

Acyl CoA:diacylglycerol transferase; DGAT; enzyme; chromosome 14; bovine; milk; meat marbling; low fat; polymorphic; SNP; single nucleotide polymorphism; PCR primer; ss.

taurus Synthetic Bos

WO2003004630-A2

05-JUL-2002; 2002WO-EP007520. 16-JAN-2003

06-JUL-2001; 2001EP-00116412. 13-MAY-2002; 2002US-0379412P (ARBE-) ARBEITSGEMEINSCHAFT DEUT RINDERZUECHTER

Winter A; Fries H,

WPI; 2003-239205/23.

New nucleic acid molecule comprising a sequence of an allele of a polymorphic bovine acyl CoA-diacylglycerol transferase gene useful for testing a mammal for its predisposition for fat content of milk and for testing a mamm meat marbling.

Example 1; Page 35; 91pp; English.

The present invention describes a nucleic acid molecule (NA) (I) encoding

cc a bovine acyl CoA-diacylglycerol transferase (DGAT) contributing to or indicative for low fat content of milk and to low meat marbling (intramuscular fat content). Human DGAT is located to chromosome 8, and bovine DGAT is located to chromosome 8, and commiscular fat content). Human DGAT is useful for testing a mammal for its predisposition for fat content of milk and/or its predisposition for fat content of milk and/or its predisposition for meat marbling. The method comprises analysing the gene cocoding DGAT for nucleotide polymorphisms are located in the roding region of the DGAT gene and result in substitution, deletion and/or addition of an amino acid sequence of the polypeptide which is encoded by the gene. The nucleic acid molecule has at the position 10433 and 10434 of the DGAT conceince of the polypeptide which is encoded by the gene. The nucleic acid molecule has at the position 10433 and 1033 a cytosine or cytosine and a cytosine or thymine and allogs a cytosine or thymine and allogs a cytosine or thymine and indo a quantine, 11048 a predisposition for low fat content of milk and low meat marbling. The nucleic acid molecule has at the position of corresponding to position 10433 and 10434 of the DGAT gene two adenine cresidues which correlate with a predisposition for high content of milk and how meat marbling. The nucleic acid molecule has at the position of the gene encoding DGAT. ABZ76924 to ABZ77045 and ABP96035 to submine the predish in the exemplification of the present 0; Gaps . 0 Length 19; 1; Indels Sequence 19 BP; 3 A; 4 C; 9 G; 3 T; 0 U; 0 Other; Score 16.4; DB 1; Pred. No. 1.2e+02; 0; Mismatches 260 BP. 5.7%; 743 GGTAGGGTCCCAGGGTCC 1 GGTAGGGTCCCAGGGTAC AAX32376 standard; DNA; 20 (first entry) Best Local Similarity 94.4 Matches 17; Conservative 16-JUN-1999 invention AAX32376; Query Match RESULT 40 AAX32376 ð g

Pulmonary hypertension; therapeutic; aerosolised; endothelin-1; ET-1; Rat endothelin-1 (ET-1) antisense sequence RnET294. 98WO-GB002584 lung; antisense; ss. 02-SEP-1998; W09911778-A1 11-MAR-1999. Synthetic. Rattus sp. 

Smith A; 97GB-00018487. Higenbottam T, Mccormack K, (UYSH-) UNIV SHEFFIELD 02-SEP-1997;

WPI; 1999-205185/17.

New composition containing an aerosolized antisense ET-1 molecule useful for treating pulmonary hypertension.

Claim 13; Page 22; 37pp; English.

The invention relates to a method for treating pulmonary hypertension by delivering a therapeutic composition, comprising an aerosolised antisense endothelin-1 (ET-1) molecule, to the lungs of a patient. The composition

..

Gaps

```
e.g. when studying molecules and observing the effects of the composition on an animal model system hypersensitive to antisense ET-1. The method is useful for treating pulmonary hypertension. The aerosolised antisense ET-1 molecule permits inhibition of the ET-1 transcription, which relieves pulmonary hypertension. Its use avoids side effects caused by alternative therapies. Sequences AAX32375-386 represent specifically claimed antisense ET-1 sequences of rat origin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   methylation in a target nucleic acid sequence using probe sets complementary to first and second binding domains located upstream and domstream of one or more methylation sites of interest in a nucleic acid sequence. Methylation determination can be combined with the detection of polymorphisms, including single nucleotide polymorphisms and/or gene dosage determinations, to provide a more complete genetic profile at a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Determining the methylation status of a target nucleic acid sequence, for identifying candidate disease genes, comprises utilizing probe sets complementary to first and second binding domains of the methylation site
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to methods for detecting the presence or absence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methylation; tumour suppressor; p53 gene; lung cancer; screening; probe;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note= "OTHER= coumarin-based photocrosslinking moiety"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note= "OTHER= coumarin-based photocrosslinking moiety"
 used in a method for determining the efficacy of the treatment
                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                5.7%; Score 16.4; DB 1; Length 20; larity 94.4%; Pred. No. 1.3e+02; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Reporter probe REP1 used in methylation assay of p53 gene.
                                                                                                                                                                                                                     Indels
                                                                                                                                              Sequence 20 BP; 2 A; 8 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; Page 46; 60pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= b
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mod base= OTHER
                                                                                                                                                                                                                                                 886 IGCACTIACTICICAGCI 903
                                                                                                                                                                                                                                                                                 1 recacricerrereager 18
                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-MAR-2003; 2003WO-US007343.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAR-2002; 2002US-0362772P
                                                                                                                                                                                                                                                                                                                                                ACF79767/c
ID ACF79767 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                                       entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    *tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Van Atta R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-756833/71
                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          the sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003076666-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (NAXC-) NAXCOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified base
                                                                                                                                                                                                                17;
                                                                                                                                                                                                                                                                                                                                                                                                                                   15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Peoples R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
modified ]
                                                                                                                                                                                                                                                                                                                                                                                                  ACF79767;
                                                                                                                                                                                  Query Match
                                                                                                                                                                                                   Local
                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                    RESULT 41
8888888888888
                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                     à
```

```
·;
                                                               through
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·.
         candidate disease genes. The present polyfluorescenated reporter probe, denoted REP1, was used in a methylation assay of the tumour suppressor p53 gene for use in lung cancer screening. The probe corresponds to nuclectides 1796-1774 of the gene. A 1080 bp sequence from exon 5 throug intron 7 of the p53 gene was used as target. This contains 4 HpaII sensitive CpG methylation sites known to be associated with malignant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a primer used in an example of the present invention which describes human squalene epoxidase. The squalene epoxidase enzyme may be used as a target enzyme for the development of anticholesterol agents. The squalene epoxidase enzyme may easily be
                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human squalene epoxidase - useful as target for development of anti-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; squalene epoxidase; HeLa cell; anticholesterol; primer; ss.
   and can be used in genotyping and identifying
                                                                                                                                                                                                ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                Score 16.4; DB 1; Length 23;
Pred. No. 1.5e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                 Sequence 23 BP; 4 A; 6 C; 9 G; 2 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5.6%; Score 16.2; DB 1;
85.7%; Pred. No. 1.8e+02;
tive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 24 BP; 9 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SHINKINRUI KINO KAIHATSU KENKYUSHO KK
                                                                                                     transformation-specific hypomethylation
                                                                                                                                                                                                                                                                                                                                                                                                                    Human squalene epoxidase primer HSE-10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; Page 13; 21pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       732 TCATAGGACTTGGTAGGGTCC 752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21 TCTTAGGACTTGGTAAGTTCC 1
                                                                                                                                                                                                                           768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 43
AAV27299/c
ID AAV27299 standard; cDNA; 24 BP.
                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96JP-00193656,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96JP-00193656
                                                                                                                                                                5.78;
                                                                                                                                                                               94.48;
                                                                                                                                                                                                                         751 CCCAGGGTCCCTAGGCCT
                                                                                                                                                                                                                                                     20 cccasscrcccasscr
                                                                                                                                                                                                                                                                                                              AAV20756/c
ID AAV20756 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   produced on a large scale
                                                                                                                                                                                          17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18; Conservative
 interest,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1998-172088/16
                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cholesterol agents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                       28-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-FEB-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ONO
                                                                                                                                                                                                                                                                                                                                                         AAV20756;
                                                                                                                                                               Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ONOI/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SHIN-)
                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                RESULT 42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                              888888888888888
                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                        ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
```

28-SEP-1998

AAV27299;

```
oligonuclectide probes (I) for use on a support to which complementary oligonuclectide probes (II) will hybridise with little mismatch, where oligonuclectide probes (II) will hybridise with little mismatch, where for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus funigatus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, buman papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification
infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, K-ras, PCR primer, probe, capture probe, mutation detection;
ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes a method (M1) for designing capture
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.5%; Score 16; DB 1; Length 24;
79.2%; Pred. No. 1.9e+02;
Live 0; Mismatches 5; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 24 BP; 2 A; 8 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                      Favis R, Kliman
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Capture oligonucleotide Zip ID#3839 oligo #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 737 GGACTIGGTAGGGTCCCAGGGTCC 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gercricerrecercechageree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 5; Fig 25; 300pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                            Gerry NP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                       (CORR ) CORNELL RES FOUND INC
                                                                                                                                                                                                                                                                       04-APR-2001; 2001WO-US010958.
                                                                                                                                                                                                                                                                                                                    14-APR-2000; 2000US-0197271P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABI90074 standard; DNA; 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 79.2
Matches 19; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                            Zirvi M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-034366/04
                                                                                                                                                                  WO200179548-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-FEB-2002
                                                                                                                                                                                                                  25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                            Barany F,
                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABI90074,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This primer was designed at the start of the mature protein for the opium poppy berberine bridge enzyme (PSBBS) gene. It was used with a primer (see AAV27300) from the stop codon region of the PSBBS gene to isolate the mature portion of the PSBRS gene. A BLAST homology search revealed high homology between PSBBS and the amino acid sequence of MS59 antifungal protein (see AAW5503) of sunflower. Claimed antifungal protein (see AAW5503) of sunflower. Claimed antifungal proteins, including MS59 and its homologues, have a mol.wt. of 55-65 kDa (SDS-PAGE), have carbohydrate oxidase activity, show anti-Phytophthora and/or anti-Pythium activity, can be expressed in transgenic plants to reduce susceptibility to infection by fungi, or expressed in host cells for use in antifungal compositions. Plants engineered to express the longer shelf-life
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ó,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New plant proteins having anti-fungal activity - useful as, e.g. carbohydrate oxidase(s) for protection against Phytophthora and Pythium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, K-ras, PCR primer, probe, capture probe, mutation detection;
ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Melchers LS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.5%; Score 16; DB 1; Length 24; 79.2%; Pred. No. 1.9e+02; cive 0; Mismatches 5; Indels
                                                                                                                                                                                            Antifungal; fungicide; MS59; poppy; carbohydrate oxidase; glucose oxidase; transgenic plant; Phytophthora; Pythium; crop protection; disease resistance; PCR; primer; ss.
                                                                                                                                            Opium poppy berberine bridge enzyme gene 5' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sela-Buurlage MB, Melcl
Lageweg W, Ponstein AS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 24 BP; 6 A; 4 C; 5 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Capture oligonucleotide Zip ID#3839 oligo #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            909 GATCAGATTATCATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 13; Page 40; 139pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24 GAGGAGATTATCATTAACATCACC 1
                                                                                                                                                                                                                                                                                                                               Papaver somniferum; cv. Marianne.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABI90075 standard; DNA; 24 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97WO-EP004923.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96EP-00202466
97EP-00200831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Custers JHHV,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Van Deventer- Troost JPE,
                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MOGE-) MOGEN INT NV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1998-230692/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 19; Conserv
```

04-SEP-1996; 19-MAR-1997;

Stuiver MH,

04-SEP-1997;

02-APR-1998.

WO9813478-A2

Synthetic

;

Gaps

. 0

15-FEB-2002

ABI90075

AB190075

Query Match

Matches

à g

```
24 Gerchiceriecercceaegree 1
                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADE52676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 46
NA WARANA WARANA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ₽
```

Detecting cancer involving oncomes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancers is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonoleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to ABI87546 represent oligonucleotide sequences used in the exemplification The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonnella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polito virus, and parasitic infectious agents medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, furner Syndrome and obesity defects. hydroxylase deficiency; Turner Syndrome; obesity; cancer; Designing capture oligonuclectide probes for use on a support to which complementary oligonuclectides hybridize with little mismatch. oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss. Kliman R; Favis R, Example 5; Fig 25; 300pp; English Gerry NP, (CORR ) CORNELL RES FOUND INC 04-APR-2001; 2001WO-US010958. 14-APR-2000; 2000US-0197271P. the present invention Barany F, Zirvi M, WPI; 2002-034366/04. infection; 21 hyd oncogene; tumour WO200179548-A2 25-OCT-2001

0 Gaps 0; 5.5%; Score 16; DB 1; Length 24; 79.2%; Pred. No. 1.9e+02; wiemmatches 5; Indels Sequence 24 BP; 7 A; 7 C; 8 G; 2 T; 0 U; 0 Other; 737 GGACTIGGTAGGGICCCAGGGICC 760 19; Conservative Query Match Best Local Similarity Matches 19; Conserv

ss.

Fungus; yeast; tetracyclin; promoter; GRACE strain; biosynthesis; signal transduction; DNA replication; cell division; growth; proliferation; Candida albicans; fungicide; antifungal; PCR; primer;

Candida albicans WO200253728-A2

Candida albicans GRACE strain PCR primer SEQ ID NO 4849.

(first entry)

30-JAN-2003

ABZ30698;

BP

ABZ30698 standard; DNA; 22

ABZ30698/c

dnaform38861 PCR primer, SEQ ID 42. BP. ADE52676 standard; DNA; 20 (first entry) 29-JAN-2004

DNA-binding protein; interferon-activatable protein; PCR; primer; ss.

Ohlsen KL;

Bussey H,

Boone C,

Jiang B,

E-

Roemer

WPI; 2002-566694/60

26-DEC-2001; 2001WO-US049486.

11-JUL-2002

29-DEC-2000; 2000US-0259128P. 20-FEB-2001; 2001US-00792024. 22-AUG-2001; 2001US-0314050P.

(BLIT-) ELITRA PHARM INC

```
0
                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to novel proteins (ADE52648-ADE52660, ADE52670 and ADE52672) and their coding sequences (ADE52635-ADE52647, ADE52669 and ADE52671). The proteins have a DNA-binding activity or an interferon-activatable protein (IAP)-like activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                            Proteins with DNA binding activity and substances that affect their activity or expression, useful for treating associated disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.4%; Score 15.8; DB 1; Length 20; 39.5%; Pred. No. 1.6e+02; Ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 3 A; 4 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                        Example 6; SEQ ID NO 42; 237pp; Japanese.
                                                                                                                                                                                                                                        Hayashizaki Y, Kamiya M, Kubodera H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            866 GITGGAACACITICCTGAG 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                 18-APR-2003; 2003WO-JP004981.
                                                                                                             19-APR-2002; 2002JP-00117840.
30-APR-2002; 2002JP-00128418.
30-APR-2002; 2002JP-00128779.
04-DEC-2002; 2002JP-00352469.
                                                                                                                                                                                               (DNAF-) DNAFORM KK.
(MITU ) MITSUBISHI CHEM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Griddaaccgrirccrdag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   89.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 89.5
nes 17; Conservative
                                                                                                                                                                                                                                                                   WPI; 2004-011681/01
                                                                                                                                                                                (RIKE ) RIKEN KK.
(DNAF-) DNAFORM F
                          WO2003089466-A1.
                                                                                                           19-APR-2002;
30-APR-2002;
                                                      30-0CT-2003
 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 47
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
```

```
Sequence 22 BP; 10 A; 8 C; 4 G; 0 T; 0 U; 0 Other;
                                           AAH40418
ð
```

```
The invention relates to constructing (M1) a strain of diploid fungal cells in which both alleles of a gene are modified, comprising modifying cells in which both alleles of a gene are modified, comprising modifying one allele by insertion or replacement by a cassette having an expressible selectable marker and modifying other allele by insertion of the second allele is regulated by the promoter. (M1) is useful for constructing a strain of diploid fungal cells in which both alleles modified are medified. The diploid fungal cells in which both alleles modified are useful for identifying a gene that is sesential to the survival or growth of a fungus, a gene that contributes to the virulence and/or pathogenicity of a fungus, a gene that contributes to the resistance of a diploid fungus to an antifungal agent that inhibits the growth of a diploid fungus contributes to the resistance of a diploid fungus to an antifungal agent that inhibits the growth of a diploid fungus can for identifying a therapeutic agent for treatment of a mammalian disease. (M1) is useful for identifying a compound which modulates the cativity of a gene product, preferably enzymatic activity, carbon compound catabolism, biosynthetic, transporter, transcriptional, cativity. The method is useful for identifying a compound having the ativity to inhibit growth or proliferation of C. albicans cells and for treating infection by C. albicans. The present sequence is that of a per primer used in the method of the invention. Note: The sequence data for this patent is not represented in the printed specification but is based on sequence information supplied to Derwent by the European Patent Office
Constructing strains for identifying gene products as effective targets for therapeutic intervention, by inactivating in the strain one allele of a gene and placing other allele of the gene under conditional expression.
                                                                                                                                                                                                                                                                                Claim 36; SEQ ID NO 4849; 167pp + Sequence Listing; English
```

Gaps .. Query Match 5.4%; Score 15.8; DB 1; Length 22; Best Local Similarity 89.5%; Pred. No. 1.9e+02; Matches 17; Conservative 0; Mismatches 2; Indels 821 TTGGCTGTGTCTTTTCT 839

22 TGGGCTGTGTCTCTTGTCT 4

AAH40418 standard; DNA; 24 BP 14-AUG-2001 (first entry) AAH40418; RESULT 48

SNP specific lower PCR primer SEQ ID 3214.

Single nucleotide polymorphism; SNP; single nucleotide primer extension; SNPE; genotyping; agammaglobulinaemia; diabetes insipidus; cancer; lesch-Nyhan syndrome; muscular dystrophy; familial hypercholesterolaemia; polycystic kidney disease; osteogenesis imperfecta; autoimmune disease; acute intermittent porphyria; rheumatoid arthritis; multiple sclerosis; inflammation; forensic investigation; paternity analysis; PCR primer; ss.

Homo sapiens

WO200129262-A2.

26-APR-2001

13-OCT-2000; 2000WO-US028436.

15-OCT-1999;

(ORCH-) ORCHID BIOSCIENCES INC.

Piccult-Newburg L, Poil M;

WPI; 2001-290930/30.

New genotyping oligonucleotide, useful for detecting the presence, absence or identity of single polynucleotide polymorphism in a nucleic acid sample.

Claim 1; Page 66; 83pp; English.

primer extension (SNPE) primers, and the sequences of regions flanking sites of single mucleotide polymorphisms SNPs. The present invention sites of single mucleotide polymorphisms SNPs. The present invention coligonucleotides with some states of the invention. The PCR primers are used to amplify a coligonucleotides of the invention. The PCR primers are used to amplify a coligonucleotides are useful for genotyping a nucleic acid sample by the oligonucleotides are useful for genotyping a nucleic acid sample by coligonucleotides are useful for genotyping a nucleic acid sample by coligonucleotides are useful for determining the presence, absence or oligonucleotides are useful for determining the presence, absence or identity of a SNP and for genotyping nucleic acid samples, for e.g. to assess by association analysis the genotype trait suspected of being caused by one or more SNPs. Phenotypic traits include diseases e.g. agammaglobulinaemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular costeogenesis imperfecta and caute intermittent porphyria. Phenotypic traits also include symptoms of or susceptibility to multifactorial confidence in confidence in or may be genetic such as autoimmune diseases including rhemmand acute intermittent porphyria. Phenotypic colisease of which a component is or may be genetic such as autoimmune diseases. diseases, including, rheumatoid arthritis, multiple sclerosis, inflammation, cancer, nervous system diseases and infection by pathogenic microorganism. The method is also useful in forensic investigations and paternity analysis. The present sequence represents a PCR primer specific Sequences AAH37205 - AAH40944 represent PCR primers, single nucleotide for a human SNP containing DNA sequence

Sequence 24 BP; 6 A; 4 C; 6 G; 8 T; 0 U; 0 Other;

Gaps : 0 5.4%; Score 15.6; DB 1; Length 24; 31.8%; Pred. No. 2.3e+02; 4; Indels 0; Mismatches Query Match Best Local Similarity 81.8%; Matches 18; Conservative

ò

725 ACTCTGGTCATAGGACTTGGTA 746 Acrerecretereseacarerra 23

> à 엄

ó

ABV90403 standard; DNA; 17 BP. (first entry) 23-DEC-2002 ABV90403; RESULT 49 ABV90403

Human, POSHL 1, SH3 domain, POSH-like signalling protein 1; oncogene; Rho Grpase; signal transduction, gene expression; cancer; vaccine; Human POSHL1 scanning oligonucleotide SEQ ID NO 1116. gene therapy; transgenic; ss. 2001WO-US000665. 2001WO-US000666. 2001WO-US000664 28-JAN-2002; 2002EP-00001165 EP1239051-A2. 30-JAN-2001; 30-JAN-2001; Homo sapiens 11-SEP-2002. 

2001WO-US000668. 2001WO-US000668. 2001WO-US000669.

30-JAN-2001; 2 30-JAN-2001; 2 30-JAN-2001; 2 30-JAN-2001;

30-JAN-2001;

23-JAN-1997

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids. (SL1, ABBA399), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Thuman POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful of right of the signal transduction pathway. (I) is useful concoding (I) are useful for diagnoshing, monitoring dissease and treating caused by altered expression of human POSHL1 including diagnosing and cuseful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating care useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the prevent by the European Patent Office
                                                                                                                                                                                                                                     Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1
                                                                                                                                                                                                                                                                                                                                Example 2; SEQ ID NO 1116; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
30-JAN-2001; 2001WO-US000670.
23-MAY-2001; 2001US-00864761.
10-OCT-2001; 2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 5.3
Best Local Similarity 94.1
Matches 16; Conservative
                                                                                             (AEOM-) AEOMICA INC
                                                                                                                                                                                           WPI; 2002-684061/74
                                                                                                                                               Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV39569;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 50
  엄
```

```
Gaps
                                     0,
5.3%; Score 15.4; DB 1; Length 17; 94.1%; Pred. No. 1.5e+02; ative 0; Mismatches 1; Indels
                              0;
                                                               744 GTAGGGTCCCAGGGTCC 760
                                                                                             1 Gradedececkadedree 17
```

ö

Mass spectrometry; diagnosis; detection; biological sample; infection; genetic disease; chromosomal abnormality; identification; heredity; pathogenic organism; telomerase activity; oncogene mutation; cancer-specific sequence; primer; ss. Mass spectrometric analysis primer SEQ ID NO:102. AAV39569/c ID AAV39569 standard; cDNA; 19 BP. 96US-00744481. 96US-00744590. 96US-00746036. 97WO-US020444. 28-SEP-1998 (first entry) WO9820166-A2 06-NOV-1997; 06-NOV-1996; 96-NON-96 14-MAY-1998 Synthetic 

99WO-IB000822. 98US-0082614P

21-APR-1999;

21-APR-1998;

```
fragments (F) from the target nucleic acid, and (ii) analysing by mass fragments (F) from the target nucleic acid, and (ii) analysing F by mass pectrometry (MS). The sequences in AAV39483 to AAV39592 are specifically claimed primers for use in the mass spectrometric analysis of the above process. The process is used to detect genetic diseases (e.g. haemophilia, thalassemia, Duchenne muscular dystrophy, Alzheimer's disease, cystic fibrosis and many others) or chromosomal abnormalities (or predisposition); infections and cancers; also for establishing identity and heredity. Particular applications are diagnosis of the compatibility, and in genetic fibrosprinting. Compared with known methods using MS, this process requires fewer specific reagents and is better suited to automation. Extended primers are shorter; primer annealing is more efficient and the process allows detection of many
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                         Sequencing nucleic acid by mass spectrometric analysis - for detecting nucleic acids, telomerase activity, oncogene mutations, or cancerspecific sequences, for diagnosis of disease.
                                                                                                                                                                                                                                                                                                                          A process has been developed for determining the sequence of a target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                 Little DP, Higgins GS;
, Van Den Boom D, Xiang G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human biallelic marker upstream amplification primer SEQ ID NO:6172.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human genome, biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.3%; Score 15.4; DB 1; Length 19; 94.1%; Pred. No. 1.8e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 3 A; 6 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                             Siegert CW, L:
3, Jurinke C,
                                                                                                                                                                                                                                                                                             Claim 48; Page 271; 478pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            769
96US-00746055.
97US-00786988.
97US-00787639.
97US-00933792.
                                                                                                                               Tang K, Fu D, Sie
Damhoffer-Demar B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ71816 standard; DNA; 19 BP
                                                                97US-00947801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       casserceceassere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          753 CAGGGTCCCTAGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 94.1
les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequences simultaneously
                                                                                               (SEQU-) SEQUENOM INC.
                                                                                                                                                                                               WPI; 1998-286975/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       diagnosis; ss
                                23-JAN-1997;
                                             9-SEP-1997;
                                                             08-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W09954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-OCT-1999
                                                                                                                            Koster H,
                                                                                                                                              Braun A,
Lough DM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ71816;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ71816/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 51
 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
ARZESES4 to ARZESES represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. ARZESES9 to ARZT7440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the cidentification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the cyfifications responses to and side effects from the sequence sequence in the SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and and in the Sequence Listing from the
                                                                                                                                                 Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.3%; Score 15.4; DB 1; Length 19; 94.1%; Pred. No. 1.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 5 A; 4 C; 6 G; 4 T; 0 U; 0 Other;
                                                                             Chumakov I;
                                                                                                                                                                                                              Claim 8; Page 1547; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          873 CACTITCCIGAGAIGCA 889
98US-0109732P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 94.1
Matches 16, Conservative
                                                                           Cohen D, Blumenfeld M,
                                                                                                                                                                           map of the human genome.
                                                                                                              WPI; 2000-013267/01
                                      (GEST ) GENSET
23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX96605;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX96605,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
  셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; neutralising epitope; PCR primer; ss. PCR primer used to amplify an ORF of Chlamydia pneumoniae. AAX96605 standard; DNA; 20 BP. 17 CACTTCCCTGAGATGCA 1 (first entry) Chlamydophila pneumoniae. WO9927105-A2 33-JUN-1999 

Genome sequence of Chiamydia pneumoniae.

WPI; 1999-357842/30.

(GEST ) GENSET

04-NOV-1998; 21-NOV-1997;

98WO-IB001890. 97FR-00014673.

The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in method comprises: (a) clones of the genomic libraries contained in multiwell plates; (b) a primer designed based on the chromosome marker content of a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell containing the clones having said marker sequence; (d) the order coft the marker is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. to array the multiwell classification Nos. are mixed respectively in each wells of longitudinal discrimination Nos. are mixed respectively in each wells of longitudinal confliction and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome; Claim 4; Page 46; 528pp; Japanese. 10-MAR-2000; 2000JP-00066716. 12-MAR-2001; 2001JP-00068285. (RIKA ) RIKAGAKU KENKYUSHO. (GENO-) GENOTEX YG. Arraying genome clones. WPI; 2002-144136/19. JP2001321190-A. PCR primer; ss. Homo sapiens. 20-NOV-2001. 

```
AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae (see AAX91990). C. pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyngitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAY34584 - AAY35879) can be used in immunogenic compositions as vaccines. Vectors containing C. pneumoniae especially where the vector directs the expression of a neutralising epitope of C. pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                       Score 15.4; DB 1; Length 20;
Pred. No. 1.9e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 6 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
             Page 1839; Disclosure; 1912pp; English.
                                                                                                                                                                                                                                                                                                                                                                  5.3%;
                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
```

0;

744

728 CIGGICATAGGACTIGG 17 CTGGTCATAGGATTTGG

g

ABL45060 standard; DNA; 20 BP. 11-APR-2002 (first entry) ABL45060; RESULT 53 ABL45060

Human chromosome 1p36-35 PCR primer SEQ ID NO:2104.

0

Gaps 0;

Indels

0; Mismatches

```
555555X8
```

```
plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are
                                                                                                                                                                                                                                                                      specifically claimed for use in the present invention
```

Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

Gaps . 0 Length 20; 3; Indels 5.2%; Score 15.2; DB 1; 85.0%; Pred. No. 2.1e+02; 0; Mismatches 869 GGAACACTITCCTGAGATGC 888 1 GGAAACATTCCTGACATGC 20 Conservative Local Similarity Hes 17; Conserv Query Match Matches

ó.

RESULT 54 **ABI93352** 

ABI93352 standard; DNA; 20 ABI93352; Capture oligonucleptide Zip ID#439 oligo #9.

(first entry)

15-FEB-2002

Human DNA MeTase DNM3a oligo SEQ ID No 20.

Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.

Synthetic

WO200179548-A2

25-OCT-2001

04-APR-2001; 2001WO-US010958.

14-APR-2000; 2000US-0197271P.

(CORR ) CORNELL RES FOUND INC

Kliman Favis R, Gerry NP, Zirvi M, Barany F,

WPI; 2002-034366/04.

Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch. Designing capture oligonucleotide

Example 5; Fig 29; 300pp; English.

oligonucleotide probes (I) for use on a support to which complementary oligonucleotide probes (I) will hybridise with little mismatch, where oligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal hapectious agents e.g. Cryptococcus neoformans, Candida albicans and hapergillus fumigatutus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents medinesis. The method is also useful for detecting genetic diseases such as I hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, p53 gene, human papillomavirus types 16 and 10 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning The present invention describes a method (M1) for designing capture 

0 electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABI82074 to Gaps ., 3; Indels Length Sequence 20 BP; 5 A; 5 C; 7 G; 3 T; 0 U; 0 Other; 5.2%; Score 15.2; DB 1; B5.0%; Pred. No. 2.1e+02; tive 0; Mismatches 3; 705 CAGCGAGICCCAGGAGAGIG 724 1 CAGCGAGTCCATGGACAGTG 20 ABT33824 standard; DNA; 20 BP (first entry) Query Match Best Local Similarity 85.09 Watches 17; Conservative of the present invention 29-MAY-2003 ABT33824; RESULT 55 ABT33824 8888888888 ö

Cytostatic; methyl transferase inhibitor; DNA methyl transferase isoform; gene therapy; anti-DNA methyl transferase oligonucleotide; inhibitor; cell proliferation; neoplasia; human DNA MeTase DNMT 1; enzyme; ds. 11-MAY-2001; 2001US-0290202P. 13-MAY-2002; 2002WO-IB003120. WPI; 2003-148369/14. (METH-) METHYLGENE WO200291926-A2. sapiens. 21-NOV-2002. Macleod AR; Ношо 

New inhibitors of DNA methyl transferase isoforms, e.g. anti-DNA methyl transferase oligonucleotides or small molecule inhibitors of DNA methyl transferase, useful for treating cell proliferative and differentiation disorders.

Claim 14; Page 23; 76pp; English.

The invention relates to an agent that inhibits one or more specific DWA methyl transferase isoforms (but not all DWA methyl transferase isoforms), such as an anti-DWA methyl transferase oligonucleotide or a small molecule inhibitor of DWA methyl transferase. The agents, oligonucleotides, inhibitors and methods are useful for identifying specific inhibition of specific DWA methyl transferase isoforms involved in cell proliferation and/or differentiation, and thus providing a treatment for cell proliferative and/or differentiation disorders, e.g. memplasia. This polynucleotide sequence represents a human DWA METASE. DNMT 1 oligo relating to the invention

Sequence 20 BP; 4 A; 6 C; 5 G; 4 T; 1 U; 0 Other;

Gaps ·. 5.2%; Score 15.2; DB 1; Length 20; 30.0%; Pred. No. 2.1e+02; Indels э; т 1; Mismatches 80.08; Conservative Local Similarity les 16; Conserv Query Match Best Loca Matches

.. 0

ABT33852

g ð

```
The invention relates to an agent that inhibits one or more specific DNA methyl transferase isoforms (but not all DNA methyl transferase isoforms), such as an anti-DNA methyl transferase oligonucleotide or a small molecule inhibitor of DNA methyl transferase. The agents, oligonucleotides, inhibitors and methods are useful for identifying specific inhibition of specific DNA methyl transferase isoforms involved in cell proliferation and/or differentiation, and thus providing a treatment for cell proliferative and/or differentiation, and thus providing a treatment for cell proliferative and/or differentiation disorders, e.g. neoplasia. This polynucleotide sequence represents a human DNA MeTase DNMI I oligo relating to the invention
                                                  Cytostatic; methyl transferase inhibitor; DNA methyl transferase isoform; gene therapy; anti-DNA methyl transferase oligonucleotide; inhibitor; cell proliferation; neoplasia; human DNA MeTase DNMT 1; enzyme; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New inhibitors of DNA methyl transferase isoforms, e.g. anti-DNA methyl transferase oligonucleotides or small molecule inhibitors of DNA methyl transferase, useful for treating cell proliferative and differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sequence sampled mapping; genomic analysis; complex genome mapping; cosmid library; chromosome 11; sequence tagged site; STS analysis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.2%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 2.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chromosome 11 (locus D1181186) STS primer cSRL-5e3-tA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
Human DNA MeTase DNM3a oligo SEQ ID No 18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      853 CGTCCTGGCTCCAGTTGGAA 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 14; Page 23; 76pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cercereciccaerracaa 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ΒÞ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94WO-US006810.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-MAY-2001; 2001US-0290202P.
                                                                                                                                                                                                                                                                                                                                                                                         13-MAY-2002; 2002WO-IB003120.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ82401 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (METH-) METHYLGENE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-148369/14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                 WO200291926-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09429486-A1
                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-2003
11-SEP-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AR;
                                                                                                                                                                                                                                                                                                                                21-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ82401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Macleod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ8240
      EX SOX MAKEN SERVICE S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytostatic; methyl transferase inhibitor; DNA methyl transferase isoform; gene therapy; anti-DNA methyl transferase oligonucleotide; inhibitor; cell proliferation; neoplasia; DNMT 3a; enzyme; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an agent that inhibits one or more specific DNA methyl transferase isoforms (but not all DNA methyl transferase isoforms), such as an anti-DNA methyl transferase oligonuclectide or a small molecule inhibitor of DNA methyl transferase. The agents, oligonuclectides, inhibitors and methods are useful for identifying specific inhibition of specific DNA methyl transferase isoforms involved in cell proliferation and/or differentiation, and thus providing a treatment for cell proliferative and/or differentiation disorders, e.g. neoplasia. This polynucleotide sequence represents a DNMT3a oligo sequence relating to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New inhibitors of DNA methyl transferase isoforms, e.g. anti-DNA methyl transferase oligonucleotides or small molecule inhibitors of DNA methyl transferase, useful for treating cell proliferative and differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.2%; Score 15.2; DB 1; Length 20; 85.0%; Pred. No. 2.1e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 4 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGTCCTGGCTCCAGTTGGAA 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Fig 4; 76pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                CGTCCTGGCTCCAGTTGGAA 872
                                                            CGTCGTGGCTCCAGTTACAA
                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-MAY-2002; 2002WO-IB003120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-MAY-2001; 2001US-0290202P.
11-MAY-2001; 2001US-0290212P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABT33822 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                             ABT33852 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                           DNMT3a oligonucleotide #5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (METH-) METHYLGENE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-148369/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 17; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200291926-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unidentified.
                                                                                                                                                                                                                                                                                                                                                                            29-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Macleod AR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABT33822;
                                                                                                                                                                                                                                                                                                                   ABT33852;
                    853
                                                                                Н
```

RESULT 57 ABT33822

ð g XXXX

· 0

Gaps

0;

3; Indels

```
(NOVS ) NOVARTIS AG.
(NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
                                                                                                                                                      WPI; 1999-527487/44
                                                                                                                                   18~FEB-1999;
                                                                                                                                       20-FEB-1998;
                                                                                                                              26-AUG-1999
                                                                                                                                                 Beck JJ;
                                                                                        RESULT 59
                                                                                           AAZ11784
δ
```

```
This primer can be used in the amplification-based detection of a fungal internal Transcribed Spacer (ITS) DNA sequence. This sequence was derived from the ITS sequences, specifically from the regions of the ITS which exhibit the greatest difference among the fungal pathotypes. This allows the identification of specific pathogens and provides a method for
New internal transcribed spacer DNA from fungal pathogens, used as
                            sources of primers and probes for pathogen detection.
                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 5 A; 4 C; 10 G; 2 T; 0 U; 0 Other;
                                                                                        Claim 13; Page 18; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     707 GCGAGTCCCAGGAGAGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAT INPP1 downstream primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX24423 standard; DNA; 23
                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                          detecting them
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX24423;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX24423
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ठ
                                                                                                                                                                                                                                                                                    Sequencing complex genomes, present as fragments in a cosmid library - by sequencing end-specific nucleotides of each clone then correlating with spatial relationship of cosmid, esp. for mammalian chromosomes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequences were determined from the ends of chromosome 11-specific cosmids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               by automated sequencing without intermediate subcloning. A sample of 371 bNA sequence fragments were determined and of these, 277 were suitable for STS primer prediction by computer analysis (using the "Primer" program available from E.Lander, MIT). The STSs and cosmids were mapped by in situ hybridisation, somatic cell hybrid analysis or both. Using this method, 370 STSs specific for human chromosome 11 were generated and most of them were regionally mapped. This procedure illustrates a novel method for sequencing complex genomes, designated "sequence sampled mapping". The sequence sampled mapping method is useful for the complete sequencing of genomic DNA directly from cosmid clones. See AAQ82001-Q82706 for STS primers. (Also see AAQ91325-58). (Updated on 25-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 5 A; 9 C; 1 G; 6 T; 0 U; 0 Other;
                                                                                                  (SALK ) SALK INST BIOLOGICAL STUDIES.
                                                                                                                                                                                                                                                                                                                                                                                                                Example 4; Page 80; 128pp; English.
            93US-00078471.
93US-00117952.
                                                                                                                                                                  Evans GA, Smith MW;
                                                                                                                                                                                                                           WPI; 1995-036508/05
               15-JUN-1993;
                                      07-SEP-1993;
```

; 0

Gaps

;

5.2%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 2.2e+02; tive 0; Mismatches 3; Indels

Conservative

17;

726

2 GCGAGTCTCGGGAGAGAC 21

BP

(first entry)

```
Myostatin; cattle; bovine; human; transforming growth factor beta; double muscling; muscle hyperplasia; transgenic animal; mh gene; comparative anchorred tagged sequence; CAT; primer; PCR; INPP1; inositol polyphosphate-1 phosphatase; ss.
                                                                                                                                                                              Homo sapiens
                                                                                                                                                      Synthetic.
                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR;
primer; detection; plant disease; crop protection; ss.
                                                                      Gaps
                                                                    0;
        5.2%; Score 15.2; DB 1; Length 21; 85.0%; Pred. No. 2.2e+02; tive 0; Mismatches 3; Indels
                                                                                                             959 CCAAATTGACTCTCAAATC 978
                                                                                                                                                              cccaáricrcrccraaarc 20
                                                                                                                                                                                                                                                                                              AAZ11784 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide primer JB676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pyrenophora tritici-repentis
                                                                                                                                                                                                                                                                                                                                                                                                 23-NOV-1999 (first entry)
Query Match
Best Local Similarity 85.0 Matches 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9942609-A1
                                                                                                                                                                                                                                                                                                                                                  AAZ11784;
```

```
This is a downstream primer for inositol polyphosphate-1 phosphatase (INPP1). Comparative anchored tagged sequences (CATS, see AAX24422-AAX24439), i.e. primer pairs that amplify a sequence tagged site from the orthologous gene in different species, were developed for a series of genes flanking Col3A1 on the human map and for which sequence information was available in more than one mammal, in order to refine the correspondence between HSA2431-33 (human chromosome 2) and BTA2412-22 (bovine chromosome 2). The CATS were used to screen a 6-genome equivalent comparative mapping was performed to define the bovine m(muscular hypertrophy) locus. The invention relates to factors affecting muscle development in mammals, especially to the identification of the bovine myostatin gene (see AAX24415). Cattle homozygous for a mutated myostatin
                                                                                                                                                                                                                                                                                                                                                                                                                                                Increasing muscle mass in mammals - by decreasing myostatin expression.
                                                                                                                                                                                                                                                                                                                                                                                        Ď;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure, Page 13; 75pp; English.
                                                                                                                                                                                                                                                                                                                                                                                           Poncelet
                                                                                                                                                                                                                                                                                         98WO-IB001197
                                                                                                                                                                                                                                                                                                                     97US-00891789
                                                                                                                                                                                                                                                                                                                                 19440000-Sn86
                                                                                                                                                                                                                                                                                                                                                                                          Georges M,
                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-120869/10.
                                                                                                                                                                                                                                                                                                                                                            (UYLI-) UNIV LIEGE
                                                                                                                                                                                                                                WO9902667-A1
                                                                                                                                                                                                                                                                                      14-JUL-1998;
                                                                                                                                                                                                                                                                                                                    14-JUL-1997;
                                                                                                                                                                                                                                                                                                                                 15-JAN-1998;
                                                                                                                                                                                                                                                            21-JAN-1999.
                                                                                                                                                                                                                                                                                                                                                                                          Grobet L,
```

99WO-EP001058 98US-00026601

```
The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human c-fos gene by RNA interference. The siNAs may or may not comprise riborncleotides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                          short interfering RNA; siRNA; double-stranded RNA; mirro-RNA; miRNA; short hairpin RNA; siRNA; expression modulation; gene therapy; drug screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; entraction gene function analysis; gene mapping; parkinson's disease; huntington's disease; palpersy; dementia; parkinson's disease; huntington's disease; proliferative disease; restenosis; polycyptic kidney disease; inflammatory disease; transplant respection; viral infection; HIV infection; autoimmune disease; transplant respection, vasotropic; nootropic; antiparkinsonian; neuroprotective; cytostatic; antiinflammatory; antiallergic; human; c-fos; ss.
                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New short interfering nucleic acid downregulates expression of the c-fos gene useful for treatment and diagnosis of diseases, e.g. cancer and
gene are double-muscled. Methods for determining muscle hyperplasia in a mammal, and for increasing muscle mass by reducing myostatin expression
                                                                                                                                        Gaps
                                                                                                                                        ;
0
                                                                                                  5.2%; Score 15.2; DB 1; Length 23; 85.0%; Pred. No. 2.5e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   RNA interference; short interfering nucleic acid; siNA;
                                                                     Sequence 23 BP; 7 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                               Human c-fos siNA lower strand, SEQ ID NO:205.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 3; SEQ ID NO 205; 145pp; English.
                                                                                                                                                                          840 TCTCTGAAGACAGCGTCCTG 859
                                                                                                                                                                                                            4 rcacrdaadaaaaccrccrc 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SIRN-) SIRNA THERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2002US-0358580P.
2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-FEB-2003; 2003WO-US005162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2002US-0409293P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2003US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Beigelman L;
                                                                                                                                                                                                                                                                                                ADE65750 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                      Local Similarity 85.0
nes 17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-679877/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003070914-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-JUN-2002;
29-AUG-2002;
05-SEP-2002;
09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-FEB-2002;
11-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-JAN-2003;
                                       are provided
                                                                                                                                                                                                                                                                                                                                                                    29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-AUG-2003
                                                                                                                                                                                                                                                                                                                                  ADE65750;
                                                                                                         Query Match
                                                                                                                                                                                                                                                                                   ADE65750/c
                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                  RESULT 61
                                                                                                                                                                                                                                                                                                    ភូភូភូន្គ
ភូភូភូន្គ
                                                                                                                                                                               à
```

```
(SiRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA deoxyribonucleotides, and can be chemically synthesised, expressed from a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate expression of the c-fos gene in cells, tissue explants or organisms of expression of the c-fos gene in cells, tissue explants or organisms of treatment of a variety of conditions. They may be used for treating central nervous system lesions and injuries (e.g., Alzheimer's disease, Parkinson's disease, Huntington's disease, epilepsy, dementia or amyotrophic lateral sclerosis); various cancers; other proliferative diseases (e.g., restenoists and polycystic kidney diseases); inflammatory and/or allergic diseases; viral infections (including HIV infection); autoimmune diseases; viral infections (including HIV infection); caucoimmune diseases; utransplant rejection. The sinAs are also useful for drug screening, diagnosis, therapeutic target identification and cultivation, and gene mapping (e.g., of single nucleotide polymorphisms).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; siRNA; expression modulation; gene therapy; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; central nervous system disorder; Alzheimer's disease; pallepsy; dementia; parkinson's disease; huntington's disease; pillepsy; dementia; amyotrophic lateral sclerosis; cancer; proliferative disease; restenosis; polycystic kidney disease; inflammatory disease; allergic disease; polycystic kidney disease; inflammatory disease; transplant rejection; varotropic; antiparkinsonian; neuroprotective; cytostatic; anticonvulsant; nephrotropic; virucide; anti-HIV; immunosuppressive; anticonvulsant; nephrotropic; human; c-fos; target sequence; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human c-fos transcript target sequence/siNA upper strand, SEQ ID NO:89.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                interference; short interfering nucleic acid; siNA;
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 12 A; 2 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 15; DB 1; Lo Pred. No. 2.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002US-0358580P.
2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
                                                                                                                                                                                                                                                                                                                                                                            targeted double-stranded siNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2002US-0409293P.
2003US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-FEB-2003; 2003WO-US005162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 825 CTGTGTCTTTTCT 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADE65634 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 100.
Les 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19 CIGIGICICITITICI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003070914-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-MAR-2002; 2
06-JUN-2002; 2
29-AUG-2002; 2
05-SEP-2002; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-AUG-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADE65634;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADE65634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
```

(SIRN-) SIRNA THERAPEUTICS INC.

Beigelman Mcswiggen J,

WPI; 2003-679877/64.

New short interfering nucleic acid downregulates expression of the cgene useful for treatment and diagnosis of diseases, e.g. cancer and inflammation.

Example 3; SEQ ID NO 89; 145pp; English.

The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human c-fos gene by RNA interference. The siNAs may or may not comprise ribonuclectides and may be double or single stranded. They further comprise sense and antisense regions, or alternatively are assembled from a sense oligonuclectide and an antisense coligonuclectide. Specifically, the siNAs include short interfering RNA (SiRNA). The siNAs can be unmodified or chemically modified, can contain deoxyribonuclectides, and can be chemically synthesised, expressed from a cort the in vitro or in vivo delivery of siNA; conjugates and/or complexes for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA; and vectors that express siNA. The siNAs are used to modulate cypression of the c-fos gene in cells, tissue explains or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the creatment of a variety of conditions. They may be used for treating central nervous system lesions and injuries (e.g., Alzheimer's disease, Parkinson's disease, Huntington's disease, epilepsy, dementia or amyotrophic lateral sclerosis); various cancers; other proliferative diseases (e.g., restenosis and injuries (e.g., Alzheimer's disease); inflammatory autoimmune diseases; urial infections (including HV infection); contral und gene mapping (e.g., of single nucleotide polymorphisms).

Coff of and secure apping (e.g., of single nucleotide polymorphisms).

Coff of the present sequence represents the upper strand of a human c-fost target semence.

Sequence 19 BP; 0 A; 5 C; 2 G; 0 T; 12 U; 0 Other;

.. 5.2%; Score 15; DB 1; Length 19; 10.0%; Pred. No. 2.1e+02; Ive 9; Mismatches 0; Indels 40.08; Query Match
Best Local Similarity 40...
Best Local 6; Conservative

ö

Gaps

825 CTGTGTCTCTTTCT 839

ð

1 cucucucucuucu 15

ABZ97787 standard; DNA; 20 BP ABZ97787; RESULT 63 ABZ97787 

17-OCT-2003 (first entry)

Human CCR3 oligonucleotide sequence.

Human; antisense; lung dysfunction; nasal airway dysfunction; antinifammatory; antiallergic; antiatiantmatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

WO200285308-A2

31-OCT-2002

15-MAY-2002; 2002EP-00010825.

18-DEC-2002.

18-MAY-2001; 2001JP-00149915.

```
first active agent comprising an oligonucleotide antisense to the intration codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intrance agent comprising an oligonucleotide antisense to the intration codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, cuse in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antishlammatory steroid in a subject, for reducing levels of adenosine ceptor, producing bronchodilation, increasing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung suffactant in a subject, stissue, or treating bronchoconstriction, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from MIPO
                                                                                                                                                                                                                                                                 Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                 Katz E, Pabalan J, Aguilar D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 7 A; 9 C; 2 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; SEQ ID NO 13029; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                            Li Y, Sandrasagra A, Ko
Tang L, Shahabuddin S;
23-APR-2002; 2002WO-US013135.
                                             24-APR-2001; 2001US-0286137P.
                                                                                           (EPIG-) EPIGENESIS PHARM INC.
                                                                                                                                                                                                                      WPI; 2003-229219/22.
                                                                                                                                                                        Miller S,
                                                                                                                                              Nyce JW,
```

Dechlorination bacteria detecting DNA related PCR primer SEQ ID No 30. Dechlorination bacteria; chlorinated ethylene; decomposing gene; high performance dechlorination bacteria; vinyl chloride; PCR; primer; Gaps 0; 5.2%; Score 15; DB 1; Length 20; 100.0%; Pred. No. 2.3e+02; tive 0; Mismatches 0; Indels 3160/c ABT23160 standard; DNA; 20 BP. 918 ATCATCACCACCACC 932 3 Archrcaccaccacc 17 (first entry) 15; Conservative Local Similarity 01-MAY-2003 Unidentified EP1266969-A1 ABT23160; Query Match Matches RESULT 64 ABT23160/ d 

ö

```
The invention relates to a novel nucleic acid which hybridises with the DNA of dechlorination bacteria preferentially at the chlorinated ethylene decomposing gene or at a position upstream of the DNA. The novel nucleic acid is useful for detecting dechlorination bacteria, by performing a polymersae chain reaction (PCR) using the novel nucleic acid for the primer and the nucleic acid(s) present in the sample bacterium for the comparts of the deriving the synthesized DNA fragments. A labelled probe of the derived from the novel nucleic acid is useful for detecting to achieve the novel nucleic acid is useful for detecting the synthesized DNA fragments. A labelled probe of the derived from the novel nucleic acid is useful for detecting to effect an RNA- or DNA-hybridisation, and detecting the label of the probe. The novel nucleic acid or its probe are useful for detecting high performance dechlorination bacteria, especially those exhibiting high activity of decomposing vinyl chloride. This polynucleotide sequence represents a PCR primer relating to the dechlorination bacteria DNA hybridising nucleic acid of the invention
                                                                                                                                                                                              Novel nucleic acid which hybridizes with DNA of dechlorination bacteria preferentially at chlorinated ethylene-decomposing gene or at position upstream of DNA, useful for detecting dechlorination bacteria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 0 C; 7 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                         Claim 2; Page 17; 60pp; English
30-JAN-2002; 2002JP-00021348.
                                                  (KURK ) KURITA WATER IND LTD.
                                                                                                     Ueno T;
                                                                                                                                                   WPI; 2003-177323/18.
                                                                                                     Nakamura K,
```

5.2%; Score 15; DB 1; Le 100.0%; Pred. No. 2.3e+02; 100.0%; Pred. no. 916 TIATCATCACCA 930 Local Similarity 100. es 15; Conservative Query Match Best Loca Matches à

17 TTATCATCACCACCA 3

0;

Gaps 0

Length 20; 0; Indels

> AAC87786 standard; DNA; 23 BP. (first entry) 01-MAR-2001 AAC87786; RESULT 65 AAC87786

Human SNORF36 receptor PCR primer SEQ ID NO:46.

antinflammatory; immunomodulatory; antibacterial; antibungal; antiviral; antinforoal; anti-HIV; analgesic; pulmonary; antiasthmatic; antiviral; antidipoetocal; anti-HIV; analgesic; pulmonary; antiasthmatic; anorectic; antidabetic; antiemetic; hypertensive; hypotensive; vasotropic; cerebroprotective; cytostatic; antiulcer; nephrotropic; antipsoriatic; antiallergic; antiparkinsonian; notropic; cardiant; neuroprotective; anticallergic; inflammation; arthritis; infection; autoimmune disease; transplant rejection; septicemia; AIDS; pain; acquired immunodeficiency syndrome; psychotic disorder; asthma; obesity; neurological disorder; respiratory disorder; bulimia; diabetes; anorexian nausea; hypertension; hypotension; vascular disorder; espiracor; cardiovascular disorder; ulcer; urinary retention; sexual disorder; reproductive disorder; renal disorder; osteoporosis; Parkinson's disease; gastrointestinal disorder; psoriasis; allergy; Alzheimer's disease; acute heart failure; huntingon's disease; PCR primer; ss.

WO200066630-A1.

09-NOV-2000

```
rine present invention describes mammatian SNOKF35 teceptors. SNOKF35 antibacterial, antifungal, antibactarial, antifungal, antivarial, antiparthy on antibacterial, antifungal, antivarial, antiparthy on our operation antibacterial, antifungal, antivarial, antiparthy on our operation antibacterial, antifungal, antibactic, antibacterial, antibacterial, antiparthy antiparthy antibactic, antibacterial, antiparthy and anticonvulsant activity. The SNORF36 creeptor nucleotide sequence can be used to produce transgenic non-human amammals, expressing a SNORF36 receptor, to determine inhibitors, activators, agonists and antagonists of SNORF36, to determine the physiological effects of varying levels of SNORF36, to determine the cisanose a predisposition to a disorder. The agonists and antagonists are used to treat abnormalities associated with SNORF36 expression. The receptor is used to design drugs for treating chronic and acute inflammation, arthritis, autoimmune diseases, transplant rejection, baccerial, fungal, protozoan and viral infections, septicemia, acquired immunodeficiency syndrome (AIDS), pain, psychotic and neurological disorders, anorexia, nausea, hyper/hypotension, vascular and cardiovascular conservatia, nausea, hyper/hypotension, vascular and cardiovascular disorders, renal disorders, ottoprosis; disease, acute heart failure, and Huntington's disease. The present
                                                                                                                                                                                                                                                                       New nucleic acid encoding a mammalian SNORF36 receptor for determining the physiological effects of varying levels of SNORF36 activity, and for diagnosing a predisposition to a disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes mammalian SNORF36 receptors. SNORF36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5.2%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 2.7e+02; ive 0; Mismatches 5; Indels
                                                                                                                                                                              Ogozalek KL, Lakhlani PP, Adham N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 23 BP; 2 A; 9 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                         Example; Page 102; 218pp; English
                 03-MAY-2000; 2000WO-US012065.
                                                             03-MAY-1999; 99US-00303593.
03-MAR-2000; 2000US-00518914.
                                                                                                                                    (SYNA-) SYNAPTIC PHARM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18; Conservative
                                                                                                                                                                                                                               WPI; 2000-665336/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                      Borowsky BE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    receptors
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
```

842 TCTGAAGACAGCGTCCTGGCTCC 864 踞 AAC87762 standard; DNA; 23 (first entry) 01-MAR-2001 AAC87762; Н RESULT 66 AAC87762 ò g

.; 0

Gaps

SNORF36a receptor; SNORF36b receptor; SNORF36 receptor; antiarthritic; antinflammatory; immunomodulatory; antibacterial; antifungal; antiviral; antiprocozoal; anti-HIV; analgesic; pulmonary; antiasthmatic; anorectic; antidabetic; antiemetic; hypertensive; hypotensive; vasocropic; cerebroprotective; cytostatic; antilicer; nephrotropic; antiparkinsonian; nockropic; cardiant; neuroprotective; anticonvulsant; inflammation; arthritis; infection; autoimmune disease; transplant rejection; septicemia; AIDS; pain; SNORF36 receptor identification primer/probe SEQ ID NO:22.

```
Borowsky BE,
        09-NOV-2000
      Mammalia.
                                        receptors
```

Gaps 0; Length 23; Indels 18; Conservative Query Match Best Local Similarity Matches

oʻ

864 23 rcreakskeccesrcrererec

RESULT 67

acquired immunodeficiency syndrome; psychotic disorder; asthma; obesity; neurological disorder; respiratory disorder; bulimia; diabetes; anorexia; nausea; hypertension; hypotension; vascular disorder; stroke; cancer; cardiovascular disorder; ulcer; uninary retention; sexual disorder; reproductive disorder; renal disorder; osteoporosis; Parkinson's disease; gastrointestinal disorder; psoriasis; allergy; Alzheimer's disease; acute heart failure; Huntington's disease; primer; probe; ss. New nucleic acid encoding a mammalian SNORF36 receptor for determining the physiological effects of varying levels of SNORF36 activity, and for diagnosing a predisposition to a disorder. Ogozalek KL, Lakhlani PP, Adham N; 03-MAY-2000; 2000WO-US012065. 03-MAY-1999; 99US-00303593. 03-MAR-2000; 2000US-00518914. (SYNA-) SYNAPTIC PHARM CORP. WPI; 2000-665336/64. WO200066630-A1.

Example; Page 80; 218pp; English

receptors can have antiinflammatory, antiarthritic, immunomodulatory, antibacterial, antifungal, antiviral, antiarthritic; immunomodulatory, antibacterial, antifungal, antiviral, antiarthritic; immunomodulatory, antibacterial, antifungal, antiviral, antiarberic, antidiabetic, antidiation and antidiabetic, agonists and antidiabetic, to determine inhibitors, activators, agonists and antidiabetic of SNORF36, to determine the activators, agonists and antidiabetic of SNORF36 expression. The adonists and antidiabetic antidiametic, antidiamedities associated with SNORF36 expression. The ceeptor is used to design drugs for treating chronic and acute inflammation, arthritis, autoimmune diseases, transplant rejection, bacterial, fungal, protozoan and viral infections, septicemia, acquired inmunodeficiency syndrome (AIDS), pain, psychotic and neurological chasorders, respiratory disorders, asthma, obestity, bulmina, diabetes, anorexia, nausea, hyper/hypotension, vascular and cardiovascular and reproductive disorders, renal disorders, string, referring antidiation, antidiati disorders, psoriasis, allergies, Parkinson's disease, Alzheimer's disease, acute heart failure, and Huntington's disease. The present sequence represents a primer/probe used in the identification of SNORF36 present invention describes mammalian SNORF36 receptors. SNORF36

Sequence 23 BP; 2 A; 9 C; 6 G; 6 T; 0 U; 0 Other;

842 TCTGAAGACAGCGTCCTGGCTCC

AAH45712 standard; DNA; 23 BP. AAH45712

Fused gene with DNA expressing polypeptide capable of capturing metal, for recombinant vectors and transformants applicable in purifying environment and recovering metal efficiently, including waste treatment. metal capture; secretory signal; ds. Metal capturing protein related DNA #5. 26-OCT-2000; 2000WO-JP007518. 99JP-00330226. (first entry) Metal capturing protein; waste treatment; primer; (TOYT ) TOYOTA JIDOSHA WPI; 2001-355927/37. Ueda M; WO200138517-A1 19-NOV-1999; 06-SEP-2001 31-MAY-2001 Synthetic. Tanaka A, 

13 ಡ The present invention relates to a fused gene containing DNAs encoding secretory signal peptide, a protein capable of capturing a metal and a protein localised on the cell surface. The gene can be used to express the metal capturing protein, which can then be used in purifying and recovering metal, for example in waste treatment. The present sequence an oligonucleotide described in the exemplification of the invention Sequence 23 BP; 7 A; 11 C; 1 G; 4 T; 0 U; 0 Other; Example 1; Fig 5; 45pp; Japanese.

Query Match

5.2%; Score 15; DB 1; Length 23; 78.3%; Pred. No. 2.7e+02; Live 0; Mismatches 5; Indels 909 GATCAGATTATCATCACCACCAC 931 18; Conservative Local Similarity Matches ð

ó

Gaps

·.

GATCCCATCACCATCACCATCAC 23 BP AAT56759 standard; RNA; 18 (revised) 25-MAR-2003 AAT56759; AAT56759/c 셤 

Mouse TNF-alpha hairpin ribozyme target sequence (nt position 1393).

(first entry)

02-APR-1997

Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; INF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;

Mus musculus,

lissencephaly, LIS; agyria-pachygyria; subcortical laminar heterotopia; SCLH; cortical dysgenesis; cryptogenic epilepsy; neurological disorder; neurodegenerative disease; Alzheimer's disease; X-linked disorder;

genetic counselling; PCR primer; ss

Homo sapiens.

Synthetic.

EP918091-A1.

26-MAY-1999.

human; detection; diagnosis; prenatal diagnosis; therapy;

Human XLIS gene fragment PCR primer 7 F.

XLIS gene;

(first entry)

14-JUL-1999

AAX36894;

AAX36894 standard; DNA; 20 BP

```
The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit TNF-alpha expression, making them potentially useful for treating rheumatoid arthritis, septic shock and other inflammatory disorders including psoriasis, as well as for treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 D DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ribozymes having modified bases and methods for producing them - for use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.1%; Score 14.8; DB 1; Length 18; 88.9%; Pred. No. 2.1e+02; artive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 5 A; 4 C; 5 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 2; Page 262; 407pp; English.
                                                                                                                                                                                                                           94US-00292620
94US-00293520
94US-00303039-
94US-00311486-
94US-00314397-
94US-00314397-
94US-0031499-
94US-00321993-
94US-00334847-
94US-00345516-
94US-00345518-
94US-00345517-
94US-00345517-
94US-00345333-
94US-00345318-
                                                                                              940S-00218934.
940S-0022795.
940S-0022483.
940S-00228041.
940S-00245736.
940S-00241280.
940S-00211280.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1995-351090/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                             07-0CT-1994;
11-0CT-1994;
 W09523225-A2
                                                                                                                                                                                                                                          19-AUG-1994;
                                                                                                                                                                                                                                                                        08-SEP-1994;
                                                                                                                                                                                                                                                                                      SEP-1994;
                                                                                                                                                                                                                                                                                                                  28-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                        04-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                      10-NOV-1994;
28-NOV-1994;
                                                       23-FEB-1995;
                                                                                                                                                                                                 15-AUG-1994;
16-AUG-1994;
                                                                                                                                                                                                                                 17-AUG-1994;
                                                                                                                                                                                                                                                                                                     23-SEP-1994;
                                                                                                                                                                                                                                                                                                                                 03-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                  16-DEC-1994
23-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-1995
                            31-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Grimm S,
Modak A,
Tracz D,
```

New gene and its gene product expressed in the brain, useful for diagnosing and treating disorders such as lissencephaly and subcortical laminar heterotopia.

(INRM ) INSERM INST NAT SANTE & RECH MEDICALE Chelly J, Kahn A, Des Portes V, Pinard J;

WPI; 1999-290318/25

97EP-00402811. 97EP-00402811

21-NOV-1997; 21-NOV-1997;

```
This sequence is a primer for the human XLIS gene of the invention. The XLIS fragments may be used to detect abnormalities in the expression of the XLIS fragments may be used to detect abnormalities in the expression of the XLIS gene transcripts or to compare their sequence with that of the CXLIS transcripts from patients for in vitro especially prenatal diagnosis of lissencephaly (LIS) (or agyxia-pachygyria), subcortical laminar continuative diseases such as Alzheimer's disease. These disorders mainly affect females as the XLIS gene is X-linked. The XLIS fragments mainly affect females as the XLIS gene is X-linked. The XLIS fragments of isorders and may be used as a tool in genetic counselling. The above consideration as ample for comparison to normal samples in the invitro diagnosis regime. This may also be performed by amplifying XLIS cDNA from the mRNA in the sample or can be administered to patients to prevent or treat the above disorders. They may also be administered to patients to prevent or treat the above disorders. They may also be administered to patients to prevent or treat the above disorders. They may also be administered to patients to prevent or treat the above disorders. They may also be administered to patients to prevent or treat the above neurological disorders. In addition XLIS may be used as a marker of neuronal calls at an early stage of development, its discovery increases understanding of both the neuronal movement which leads to development of the cortical region of the brain and of the cortical region of the brain and of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.1%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 2.4e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 2 A; 6 C; 1 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 9; Page 50; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 88.9
Matches 16; Conservative
```

842 825 CIGIGICICITITICITCI m 엄 ð

; 0

Gaps

0;

840 TCTCTGAAGACAGCGTCC 857

δ g

16; Conservative

18

RESULT 69 AAX36894

ô

RESULT 70 AAZ92077

```
Streptococcus pneumoniae.
                                                          WPI; 2000-256579/22.
                         PCR primer; ss.
                                 WO200012531-A1.
                                         17-AUG-1999;
                                             27-AUG-1998;
        09-JUN-2000
                                     09-MAR-2000.
                                                      Kallender H;
    AAZ92077;
```

```
The sequence represents PCR primer IFN-gamma sense, used to follow the progress and/or treatment of multiple sclerosis (MS). This is done by determining the amount of following cytokines, interleukin (IL)-18, IL-12p40, interferon (IFN)-gamma, IL-4, IL-10, transforming growth factor (TGF)-beta, IL-12Rbetal, IL-12Rbeta2 and/or IL-12p35 of the first bological sample obtained from person suffering from or suspected to suffer from MS, and optionally comparing it with a reference value. This method is useful for determining the success rate of treatment of MS by discriminating between patients with MS (regardless of the clinical subtypes) and healthy controls, on the basis obtained from person suffering from or suspected to suffer from MS. The method enables a clinician to be able to determine or further substantiate the clinical subtype of patient quickly and accurately, and immediately upon the first
                                                                                                                                                                                                                                                                                                                             PCR primer; multiple sclerosis; MS; therapeutic; cytokine; interleukin; (IL)-18; IL-12p40; interferon-gamma; IFN-gamma; IL-4; IL-10; IL-12p35; transforming growth factor beta; TGF-beta; IL-12Rbeta1; IL-12Rbeta2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monitoring progress and/or treatment of multiple sclerosis by comparing levels of interleukin (IL)-18, IL-12p40, interferon-gamma, IL-4, IL-10, transforming growth factor-beta, IL-12Rbetal, 2 and/or IL-12p35.
                                                                                                                                                                                                                                                                   PCR primer IFN-gamma sense used to follow progress/treatment of MS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.1%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 2.4e+02; live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Polman CH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Van Boxel- Dezaire AHH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 11; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (NEDE ) NEDERLANDSE ORG TOEGEPAST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              953 GAAGAGCCAAATTGACTC 970
                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-OCT-2000; 2000EP-00203765.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-OCT-1999; 99EP-00203551.
30-MAR-2000; 2000EP-00201167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                 AAS10705 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCAGAGCCAAATTGTCTC
                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAD36541 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-443845/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nagelkerken AM,
                                                                                                                                                                                                                                                                                                                                                                                                                                     diagnostic; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EP1114998-A2
                                                                                                                                                                                                         24-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-JUL-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16;
                                                                                                                                           AAS10705;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAD36541;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                      RESULT 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 72
                                             AAS10705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAD36541
ID AAD3
XX
AC AAD3
XX
DT 09-1
XX
DE HUME
                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence is a PCR primer for the Streptococcus pneumoniae ratC DNA of the invention. The ratC protein may be used to screen for its agonists and antagonists by contacting it with a candidate compound and detecting any alteration in the activity of ratC. Alternatively, the effect of a candidate compound on the production of mRNA encoding ratC may be detected using an ELISA assay. Agonists of ratC may be administered to patients to treat conditions associated with increased expression or activity of ratC. Agonists of ratC may similarly be used to treat conditions arising from altered expression or activity of ratC. Diseases or conditions arising from altered expression or activity of ratC conditions arising from altered expression or activity of ratC detecting a mutation in the ratC coding sequence in the genome of the content of the ratC coding sequence in the genome of the companient. These diseases or conditions include bacterial infections, especially Streptococcus pneumoniae infections, and Helicobacter pylori infections, office media, conjunctivitis, pneumonia, bacteraemia, meningitis, sinusitis, and gastrointestinal carcinomas. A computer readable medium containing the ratC man account of the containing the ratC man agastrointestinal carcinomas. A computer readable medium containing the ratC man account of the containing the ratC contains account of the containing the ratC contains account
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           containing the rate DNA sequence may be used in a computer based method for performing homology identification, comprising providing the rate DNA in the computer readable medium and comparing the polynucleotide sequence to at least one polynucleotide or polypeptide sequence to identify used in a computer based method for polynucleotide assembly, comprising providing rate in a computer readable medium and screening for at least one overlapping region between a the first and a second polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                               Streptococcus pneumoniae, ratt; bacterial infection, pleural empyema; Helicobacter pylori infection, otitis media, conjunctivitis; pneumonia; bacteraemia; meningitis; sinusitis; endocarditis; therapy; gastritis; computer readable medium; gastric ulcer; gastrointestinal cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Streptococcus pneumoniae ratC polypeptide and polynucleotide useful treating bacterial infections, especially meningitis and pneumonia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                     PCR primer for Streptococcus pneumoniae ratC coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.1%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 2.4e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 11 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure, Page 17; 60pp, English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SMIK ) SMITHKLINE BEECHAM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       940 GAATTTTACGCAAGAAGA 957
         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 GAAAATTACGCAAGAAGA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US018701,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-00140580.
AAZ92077 standard; DNA; 20
                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
```

0;

Gaps

.

Human Her-1 antisense oligonucleotide ISIS #122150.

Local Similarity Les 16; Conserv

8

Query Match Best Loca Matches Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;

The invention relates to an antisense oligonucleotide targetted to a nucleic acid molecule encoding human epidermal growth factor receptor (Her1) to inhibit its expression. The antisense compounds are useful for treating diseases or conditions associated with Her-1 such as hyperproliferative diseases especially cancer (lung, ovarian, colon or prostrate cancer) and psoriaais. They are also useful as research reagents, diagnostics, therapeutics, kits and prophylactically e.g. to prevent or delay tumour formation. The present sequence is an antisense oligonucleotide targetted to human Her-1 Novel antisense oligonucleotide that specifically hybridizes with and inhibits nucleic acid encoding epidermal growth factor receptor, useful for treating hyperproliferative disease such as cancer or psoriasis. Human, epidermal growth factor receptor; hyperproliferative disease; Herl; antisense; prophylaxis; psoriasis; phosphorothicate backbone; /mod_base= OTHER /note= "2'methoxyethyl nucleotides"  $not\bar{e}=$  "2'methoxyethyl nucleotides" "mod_base= OTHER
'note= "Phosphorothioate backbone" Location/Qualifiers Freier SM; Claim 1; Page 45; 169pp; English. 'mod base= OTHER /*tag= i
/mod base= m5c m5c mod_base= m5c.6...20 /*tag= i /mod_base= m5c *tag= d 'mod_base= m5c /*tag= f /mod_base= m5c m5c 28-SEP-2001; 2001WO-US030551. 29-SEP-2000; 2000US-00676610. /*tag= g /mod_base= 1 mod_base= υ 口 ๙ Ω Φ Bennett CF, Wyatt JR, *tag= (ISIS-) ISIS PHARM INC. *tag= *tag= *tag= tag= WPI; 2002-394234/42. tumour; cancer; ss. WO200226758-A1 modified base modified base modified base modified base modified base modified_base modified_base modified base modified base modified_base Homo sapiens. Synthetic. 04-APR-2002

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to the isolation of novel human PRO polypeptides (AAU86128-AAU86162) and the polynucleotide sequences encoding them. The PRO polypeptides, agonists, antagonists or anti-PRO antibodies are useful for treating benign or malignant tumnous (e.g. renal, kidney, bladder, breast, etc), leukaemias and lymphoid malignancies, other disorders such as neuronal, glial, astrocytal, hypothalamic, glandular, macrophagal, stromal and blastocoelic disorders,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Thirty five nucleic acids encoding PRO polypeptides, useful for treating benign or malignant tumors, leukemias and lymphoid malignancies, inflammatory, angiogenic and immunologic disorders.
                                                                                                                                                                                                                                                    leukaemia; neuronal disorder; stromal disorder; blastocoelic disorder; inflammatory disorder; immune disorder; angiogenic disorder; cytostatic; neuroprotective; PCR; primer; ss.
                           Gaps
                                                                                                                                                                                                               Forward PCR primer for gene amplification analysis of human PRO542.
                                                                                                                                                                                                                                        Human; PRO; benign tumour; malignant tumour; lymphoid malignancy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hillan KJ;
                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stone DM;
Length 20;
                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gurney AL,
Smith V,
5.1%; Score 14.8; DB 1;
88.9%; Pred. No. 2.4e+02;
iive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Goddard A, Godowski PJ,
Pan J, Pitti RM, Roy MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 26; Page 145; 302pp; English.
                                                    912
                                                                             rrcrcaccircressarc 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0151689P.
99WO-US020111.
99WO-US021090.
                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0123972P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-0140653P.
99US-0144758P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0146222P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US028634,
2000WO-US000219,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US012252
99US-0140650P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US028313
99WO-US028301
                                                                                                                                                                                                                                                                                                                                                                                     11-FEB-2000; 2000WO-US003565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-0145698P
                                                      TICICAGCTICIGCGAIC
                                                                                                                                           20
                                                                                                                                                                                              (first entry)
                              Conservative
                                                                                                                                           ABK40432 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pan J, F
Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-205567/26.
              Local Similarity
nes 16; Conserv
                                                                                                                                                                                                                                                                                                                                    WO200153486-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ashkenazi AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-JUL-1999;
28-JUL-1999;
17-AUG-1999;
31-AUG-1999;
01-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Marsters SA,
Watanabe CK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-JAN-2000;
                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-DEC-1999;
01-DEC-1999;
                                                                                                                                                                                              15-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-JUN-1999
                                                                                                                                                                                                                                                                                                                                                             26-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                              08-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                      11-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-JUL-1999
                                                       895
                                                                                                                                                                      ABK40432;
     Query Match
                              Matches
                                                                                                                  RESULT 73
                                                                                                                                 ABK40432
                                                                                                                                                         ð
                                                                               엄
```

.

Gaps 0;

2; Indels

Score 14.8; DB 1; Pred. No. 2.4e+02; 0; Mismatches 2;

5.1%;

Length 20;

```
chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
inflammatory, immune and angiogenic disorders. The polynucleotide sequences are also useful in gene therapy. The present sequence represents a PCR primer used in the methods of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human chromosome 1p36-35 PCR primer SEQ ID NO:1794.
                                                                                    Sequence 20 BP; 1 A; 8 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                   760 CCTAGGCCTCCACTTCTG 777
                                                                                                                                                                                                                                                           1 ccircicirciaricis 18
                                                                                                                                                                                                                                                                                                                                                                    ABL44750 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-APR-2002 (first entry)
                                                                                                                          Query Match 5.19
Best Local Similarity 88.99
Matches 16, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                 ABL44750;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human;
                                                                                                                                                                                                                                                                                                                                              ABL44750/c
                                                                                                                                                                                                                                                                                                                            RESULT 74
    888666
                                                                                                                                                                                                                   à
```

The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected results and (i) the clones in the multiwell reconstituted as the products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. AB142957 to AB145322 represent PCR primers for human chromosome 1p36-35 DNA, and AB145323 to AB145634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention Claim 4; Page 40; 528pp; Japanese. 12-MAR-2001; 2001JP-00068285. 10-MAR-2000; 2000JP-00066716. (RIKA ) RIKAGAKU KENKYUSHO. (GENO-) GENOTEX YG. Arraying genome clones. WPI; 2002-144136/19. JP2001321190-A. 20-NOV-2001. 

Disclosure, SEQ ID NO 2605; 872pp; English.

Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

5.1%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 2.4e+02; Best Local Similarity Query Match

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                           Pharmaceutical composition for treating ailments associated with impaired
                                                                                                                                                                       Human; antisense; lung dysfunction; nasal airway dysfunction; antinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; Pypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                      respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid
                                                                                                                                                                                                                                                                                                                                                                              Ö
   ;
0
                                                                                                                                                                                                                                                                                                                                                                            Katz E, Pabalan J, Aguilar
  Indels
  2;
 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                          Li Y, Sandrasagra A, K.
, Tang L, Shahabuddin S;
                    778 AGGCCAGCCCCTCTGGTG 795
                                                                                                                                                      Human oligonucleotide sequence.
                                         7
                                                                                        ABZ87363 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                              23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                                                                                                                                  24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                                                                                                                                                                      (EPIG-) EPIGENESIS PHARM INC.
                                      19 AGGCAGCCTCTCTGATG
                                                                                                                                   (first entry)
16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-229219/22
                                                                                                                                                                                                                                                                      WO200285308-A2
                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                   17-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ubiquinone
                                                                                                                                                                                                                                                                                                                                                                                      Miller S,
                                                                                                             ABZ87363;
                                                                                                                                                                                                                                                                                                                                                                           Nyce JW,
Matches
                                                                     RESULT 75
                                                                                ABZ87363
                                                                                                   ð
                                    g
```

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding reggion, 5 or 3 and ganomic flanking regions, 5 and 3 intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antialergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of underly an in a subject, for reducing levels of enemesting levels of uncasarian environment in an increasing levels of underlying in a subject, for reducing levels of adenosine or lund an environment in a subject, for reducing levels of adenosine or lund environment lund environ lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 20 BP; 3 A; 5 C; 2 G; 10 T; 0 U; 0 Other;

Length 20; Score 14.8; DB 1; Pred. No. 2.4e+02; 5.1%; Best Local Similarity Query Match

```
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        16; Conservative
                                                                                                                                             (UYRQ ) UNIV ROCKEFELLER
                                                                                                                                                              Bhardwaj N,
                                                                                                                                                                                                                   or autoimmune diseases.
                                                                                                                                                                                WPI; 1999-540306/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-SEP-1996
                                                     WO9942564-A2
                                                                                        19-FEB-1999;
                                                                                                         20-FEB-1998;
                                                                                                                           24-SEP-1998;
                                                                                                                   06-MAR-1998;
                                                                       26-AUG-1999
                                                                                                                                                               Ä,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT10463;
                                                                                                                                                              Albert
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT10463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
6
                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to novel proteins (ADE52648-ADE52660, ADE52670 and ADE52672) and their coding sequences (ADE52635-ADE52647, ADE52669 and ADE52671). The proteins have a DNA-binding activity or an interferon-activatable protein (IAP)-like activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Immunodominant; influenza virus; apoptosis; antigen; dendritic cell; cytotoxic T lymphocyte; T helper cell; vaccine; malaria; HIV; EBV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                       DNA-binding protein; interferon-activatable protein; PCR; primer; ss.
 Gaps
                                                                                                                                                                                                                                                                                                                                                                  Proteins with DNA binding activity and substances that affect their activity or expression, useful for treating associated disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5.1%; Score 14.8; DB 1; Length 20; 88.9%; Pred. No. 2.4e+02; tive 0; Mismatches 2; Indels
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 7 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
  2,
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                              Example 6; SEQ ID NO 49; 237pp; Japanese
                                                                                                                                                                                                                                                                                                                                 H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Dendritic cell beta-3 PCR primer #1.
                                                                                                                                                                                                                                                                                                                                 Hayashizaki Y, Kamiya M, Kubodera
                                                                                                                                        dnaform60441 PCR primer, SEQ ID 49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 866 GTTGGAACACTTTCCTGA 883
                    843
  ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ07011 standard; DNA; 22 BP
                                                                                   BP
                                                                                                                                                                                                                                                 19-APR-2002; 2002JP-00117840.
30-APR-2002; 2002JP-00128418.
30-APR-2002; 2002JP-00128779.
34-APR-2002; 2002JP-00352469.
                                                                                                                                                                                                                                                                                                               MITSUBISHI CHEM CORP
                                                                                                                                                                                                                                 18-APR-2003; 2003WO-JP004981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTGGAACCGTTTCCTGA
                     826 TGTGTCTCTTTCTCTC
                                      rerarcicrerrerrerc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                   ADE52683 standard; DNA; 20
                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16; Conservative
   Conservative
                                                                                                                                                                                                                                                                                                                                                  WPI; 2004-011681/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                             (RIKE ) RIKEN KK.
(DNAF-) DNAFORM KK.
                                                                                                                                                                                            WO2003089466-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-NOV-1999
                                                                                                                       29-JAN-2004
                                                                                                                                                                                                               30-0CT-2003
                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ07011;
                                      m
                                                                                                     ADE52683
                                                                                                                                                                                                                                                                                                                (MITU)
    Matches
                                                                           ADE52683/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
                                      qq
                      à
```

```
Amethod (A) has been developed of delivering antigens to dendritic cells (DCS). (A) comprises contacting DCS with apoptotic cells (ACS) expressing an antigen where the contact allows the antigen to be internalised by the DCS, and where the ACS have been induced in vitro to become apoptotic. The DCS can be loaded with antigens such as antigens derived from cell carcinoma antigens, and melanoma antigens. In addition, self antigens that are targets of autoimmune responses or other antigens for which it is desired to attenuate an immune response can be expressed on donor cells using the methods, e.g. insulin, histones or GAD. The products can be used for the prophylactic or therapeutic treatment of diseases such as e.g. bacterial infections, protozoan infections, such as cor influenza, cancers or malaria, listeriosis, microbial infections, viral infections such as HIV cor influenza, cancers or malarial such as melanoma, autoimmune diseases such as psoriasis and ankolysing spondylitis. The present sequence represents a PCR primer used to amplify beta-3 from dendritic cells used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Aptastruc oligonucleotide; non-linear; target; self-annealing; hairpin; stem; TAR; HIV; tat protein; viral development; regulatory element; mini-exon; trypanosome; iron response element; ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Production of antigen loaded dendritic cells, used for developing products for treating e.g. cancer or malignancies, microbial infections
human papilloma virus; CMV; renal cell carcinoma antigen; melanoma; immune response; insulin; histone; infection; listeriosis; cancer; autoimmune disease; psoriasis; ankolysing spondylitis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Anti-HIV TAR region 'Aptastruc' family 1 oligonucleotide #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.1%; Score 14.8; DB 1; Length 22; 88.9%; Pred. No. 2.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 22 BP; 1 A; 5 C; 6 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Inaba K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Steinman RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 7; Page 71; 165pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0077095P.
98US-0101749P.
                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-US003763.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0075356P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     820 GITGGCTGTGTCTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gridecrerercearri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT10463 standard; DNA; 21
```

0

```
The oligonucleotides AAT10455-82 represent examples of novel oligonucleotides designated 'Aptastruc'. The oligonucleotides have affinity for non-linear target sequences e.g a self-annealed hairpin structure. They have a complementary sequence to part of the linear (stem) of the target whereas the remainder (i.e. either end) of the oligonucleotide does not interact with the target sequence. The which binds to the tar protein during viral development. The novel oligonucleotides are generally targeted to regulatory elements such as mini-exon from trypanosomes, the HIV TAR or an iron response element. They may either bind to the target sequence to interfere with its regulatory role or may contain a functional group e.g. a ribozyme to cleave the target sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                             New oligo:nucleotide with affinity for non-linear target - includes a sequence preventing canonical interaction but able to form a complex, used to prevent development of viruses, bacteria and parasites.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HIV; gag gene; amplification; detection; repair-mediated process; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Blunt ended oligonucleotide B used in HIV GAG amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ch 5.0%; Score 14.6; DB 1; Length 21; 1 Similarity 81.0%; Pred. No. 2.8e+02; 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 4 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                      (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          712 TCCCAGGAGAGTGACTCTGGT 732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Page 21; 48pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88US-00221750.
91US-00784749.
92US-00841649.
                                                                                                                                     95WO-FR001036.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ35294 standard; DNA; 21 BP
                                                                                                                                                                                                 94FR-00009578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  93US-00155938.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                         Foulme J, Mishra R;
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1996-129391/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEGE/) SEGEV
                                                                                                                                                                                          02-AUG-1994;
      WO9604374-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-OCT-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-JUL-1988;
                                                               15-FEB-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-OCT-1991;
20-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS6004826-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ35294;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Segev D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ35294/c
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             X LX A X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X
```

```
Oligomucleotide B is 1 of 4 blunt-ended sequences (see AA235292-95) used in an example of the gap-filling/ligating embodiment of a new repair-ce mediated process for amplifying and detecting nucleic acid sequences. The target was the HIV GAG region 2106-2153 (see AA235291). Blunt ends are created after incorporation of 2'-deoxyadenosine 5'-O-(1-tintriphosphate) (darpfelapha-S) at the 3' end of each sequence. A gap of 5 base pairs exits between oligomucleotides A and B or A' and B' when these strands are hybridised to their complementary strand of the target complementary strands of DNA target with a molar excess of complementary to the target, under hybridising conditions. In one embodiment, the OCPS may have a gap of 1 or more bases which may be complement (filled) by enzymes. The OCPS are joined together, forming a joined, oligomucleotide product. The target/joined product hybrid nucleic repaired (filled) by enzymes. The OCPS are joined together, forming a caids are then denatured to single strands again, at which point both the target and the joined products can form hybrids with new OCPS. The steps of the reaction are carried out stepwise or simultaneously and can be specific nucleic acid sequences associated with infections and/or mutations in the genomic DNA from any organism. The method is performed using heat-label and the joined products and form any arganism. The method is performed using heat-label and the inference of the organism. The method is performed using heat-label and the inference of the organism. The method is performed using heat-label and the method is performed using heat-label and the method is performed and the method and t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                         Detecting a specific nucleic acid target molecule using a repair mediated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HIV; gag gene; amplification; detection; repair-mediated process; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sticky ended oligonucleotide F' used in HIV GAG amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 5.0%; Score 14.6; DB 1; Length 21; Best Local Similarity 81.0%; Pred. No. 2.8e+02; Matches 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         abile enzymes or without any enzymes, and may be automated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 6 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTCTCTTTTCTCTCAAGA 849
                                                                                                                  Example 1; Col 14; 33pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21 GGCTCTGGTCTGCTCTGAAGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93US-00155938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             91US-00784749.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88US-00221750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ35299 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-105084/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SEGE/) SEGEV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-OCT-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-JUL-1988;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-OCT-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JS6004826-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ35299;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Segev D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ35299
g
```

0;

Gaps

.; 0

```
Oligomucleotide F' is 1 of 4 sticky-ended sequences (see AAZ35296-99) used in an example of the gap-filling/ligating embodiment of a new repair—mediated process for amplifying and detecting nucleic acid sequences. The target was the HIV GAG region 2106-2153 (see AAZ35291). The amplification process involves treating RNA or separate complementary strands of DNA target with a molar excess of oligomucleotide complement pairs (OCPs), the OCPs having sequences complementary to the carget wither hybridising conditions. In one embodiment, the OCPs may have a gap of 1 or more bases which may be repaired (filled) by enzymes. The OCPs are joined together, forming a joined, oligomucleotide product. The target/joined product hybrid nucleic acids are then denatured to single strands again, at which point both the target and the joined products can form hybrids with new OCPs. The steps of the reaction are carried out stepwise or simultaneously and can be repeated as often as desired. The
Detecting a specific nucleic acid target molecule using a repair mediated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  process enables the detection of specific nucleic acid sequences associated with infectious disease, genetic disorders or cellular disorders such as cancer. The length and sequences of the Ordes can varied to detect deletions and/or mutations in the genomic DNA from any organism. The method is performed using heat-labile enzymes or without any enzymes, and may be automated
                                                                                                Example 1; Col 14; 33pp; English.
                                                process
```

5.0%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 2.8e+02; Indels Sequence 21 BP; 2 A; 5 C; 7 G; 7 T; 0 U; 0 Other; 0; Mismatches 828 IGICICITITICITCIGAAG 848 21 1 TGGCTCTGGTCTGCTCTGAAG Query Match
Best Local Similarity 81.0
Matches 17; Conservative Пp à

HIV; gag gene; amplification; detection; repair-mediated process; ss. Sticky ended oligonucleotide F used in HIV GAG amplification. 298/c AAZ35298 standard; DNA; 21 BP. 27-MAR-2000 (first entry) Synthetic. AAZ35298 AAZ35298/c ID AAZ3 RESULT 81 

88US-00221750. 91US-00784749. 92US-00841649. 93US-00155938 27-OCT-1993; 20-JUL-1988; 28-OCT-1991; 20-FEB-1992; US6004826-A 21-DEC-1999

Ü, SEGEV (SEGE/)

WPI; 2000-105084/09. Segev D;

Detecting a specific nucleic acid target molecule using a repair mediated

Oligonucleotide F is 1 of 4 sticky-ended sequences (see AAZ35296-99) used

Example 1; Col 14; 33pp; English.

the OCPS having sequences complementary to the target, under hybridising conditions. In one embodiment, the OCPS may have a gap of 1 or more bases which may be repaired (filled) by enzymes. The OCPS are joined together, forming a joined, oligonucleotide product. The target/joined product hybrid nucleic acids are then denatured to single strands again, at which point both the target and the joined products can form hybrids with new OCPs. The steps of the reaction are carried out stepwise or simultaneously and can be repeated as often as desired. The process enables the detection of specific nucleic acid sequences associated with infectious disease, genetic disorders or cellular disorders such as cancer. The Joych have the detection of the OCPS can be varied to detect the occasion of the OCPS can be varied to detect the occasion of the OCPS can be varied to detect the occasion of the OCPS can be varied to detect the OCPS can be varied to detect the occasion of the OCPS can be varied to detect the OCPS can be occasioned to the OCPS can be o in an example of the gap-filling/ligating embodiment of a new repair-mediated process for amplifying and detecting nucleic acid sequences. The target was the HIV GAG region 2106-2153 (see AAZ35291). The amplification process involves treating RNA or separate complementary strands of DNA target with a molar excess of oligonucleotide complement pairs (OCPS), and method is performed using heat-labile enzymes or without any enzymes, deletions and/or mutations in the genomic DNA from any organism. The 

Sequence 21 BP; 6 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

0 Gaps 0; 5.0%; Score 14.6; DB 1; Length 21; 11.0%; Pred. No. 2.8e+02; Indels 0; Mismatches 81.0%; 17; Conservative Best Local Similarity Query Match Matches

829 GICTCTTTTCTTCTGAAGA 849 21 gecreregrerecreakek

g à

ö

Gaps

0

BP. AAZ35295 standard; DNA; 21 (first entry) 27-MAR-2000 AAZ35295; 82 AAZ35295 RESULT

HIV; gag gene; amplification; detection; repair-mediated process; Blunt ended oligonucleotide B' used in HIV GAG amplification. 88US-00221750. 91US-00784749. 92US-00841649. 93US-00155938. 27-OCT-1993; 20-JUL-1988; 28-OCT-1991; 20-FEB-1992; 21-DEC-1999. US6004826-A Synthetic.

SB.

Detecting a specific nucleic acid target molecule using a repair mediated WPI; 2000-105084/09 Segev D; 

ä

(SEGE/) SEGEV

Oligonucleotide B' is 1 of 4 blunt-ended sequences (see AAZ35292-95) used in an example of the gap-filling/ligating embodiment of a new repair-mediated process for amplifying and detecting nucleic acid sequences. The trarget was the HIV GAG region 2106-2153 (see AAZ35291). Blunt ends are created after incorporation of 2'-deoxyadenosine 5'-0-(1-thiotriphosphate) (dATP(alpha-S)) at the 3' end of each sequence. A gap of 5 base pairs exits between oligonucleotides A and B or A' and B' when Example 1; Col 14; 33pp; English. process

```
Sequence. The amplification process involves treating RNA or separate complementary strands of DNA target with a molar excess of oligomucleotide complement pairs (OCPB), the OCPB having sequences complements to the target, under hybridising conditions. In one impodiment, the OCPB may have a gap of 1 or more bases which may be lopaired (filled) by enzymes. The OCPB mare joined together, forming a cids are then denatured to single strands again, at which point both the target and the joined product. The target/joined product hybrid nucleic farget and the joined products can form hybrids with new OCPs. The steps of the reaction are carried out stepwise or simultaneously and can be special as often as desired. The process enables the detection of specific nucleic acid sequences associated with infections disease,
                                                                                                                                                                                                                                                                                                                                                                                         genetic disorders or cellular disorders such as cancer. The length and sequences of the OCPs can be varied to detect deletions and/or mutations in the genomic DNA from any organism. The method is performed using heat-
these strands are hybridised to their complementary strand of the target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                labile enzymes or without any enzymes, and may be automated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 2 A; 5 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81.0%;
```

```
.;
0
  5.0%; Score 14.6; DB 1; Length 21;
11.0%; Pred. No. 2.8e+02;
.ve 0; Mismatches 4; Indels
                                                                             828 IGTCTCTTTTCTTCTGAAG 848
Query Match 5.0
Best Local Similarity 81.0
Matches 17; Conservative
                                                                             à
```

1 réscricresricresricade 21 유

AAZ75874 standard; DNA; 21 BP. AAZ75874; RESULT 83 AAZ75874 

(first entry) 10-SEP-2001

Human biallelic marker downstream amplification primer SEQ ID NO:10230. Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer; diagnosis; ss

Homo sapiens

WO9954500-A2

28-OCT-1999

99WO-IB000822, 21-APR-1999;

98US-0082614P 21-APR-1998; 23-NOV-1998;

(GEST ) GENSET

Chumakov I; Blumenfeld M, Cohen D,

WPI; 2000-013267/01.

Novel biallelic markers used to construct a high density disequilibrium map of the human genome. Claim 9; Page 2411; 2745pp; English.

AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ6959 to AAZ7440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies

which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the dentification of the targets for the development of pharmaceutical agents and disgnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment. N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and present invention 888888888888888

Sequence 21 BP; 4 A; 5 C; 4 G; 8 T; 0 U; 0 Other;

Gaps 0; 5.0%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 2.8e+02; cive 0; Mismatches 4; Indels 17; Conservative Local Similarity Query Match Matches à

· 0

ద

AAC63802/c RESULT

6

Gaps

AAC63802 standard; DNA; 21 BP.

AAC63802;

(first entry) 09-FEB-2001

Human DSP-3 RACE PCR primer, SEQ ID NO:6.

Human DSP-3; dual-specificity phosphatase; antibody, dual-specificity MAP kinase phosphatase; drug screening; protein tyrosine phosphatase family; PTP: recombinant production; proliferative response; cell differentiation; cell survival; proliferative disorder; cell differentiation; call survival; proliferative disorder; cell dycle abnormality; metabolic disease; Duchenne muscular dystrophy; cancer; graft-versus-host disease; autoimmune disease; allergy; rapid amplification of cDNA ends; RACE PCR primer; ss.

Homo sapiens.

WO200060092-A2.

12-OCT-2000.

07-APR-2000; 2000WO-US009185. 99US-0142338P. 07-APR-1999; 99US-0128225P 02-JUL-1999; 

(CEPT-) CEPTYR INC.

Luche RM,

WPI; 2000-665011/64.

Novel dual-specificity mitogen activated protein kinase phosphatase polypeptide useful in screening assays for identifying agents that modulate activity of the protein which are useful for treating cancer and autoimmune diseases.

Example 1; Page 46; 60pp; English.

The invention relates to a human dual-specificity mitogen-activated protein (MAP) kinase phosphatase, DSP-3, and to nucleic acids encoding it. The invention also relates to variants of DSP-3 which retain activity, expression vectors and host cells comprising DSP-3-encoding DNA, the recombinant production of DSP-3, an anti-DSP-3 antibody, and a DSP-3 substrate-trapping mutant protein that has a reduced ability to dephosphorylate a substrate relative to the wild-type DSP-3. The invention additionally encompasses use of a DSP-3 modulator to modulate a proliferative response, cell differentiation or cell survival. The DSP-3

```
protein is useful for screening an agent that binds to DSP-3 and/or modulates DSP-3 activity, and is also useful for raising antibodies. DNA encoding DSP-3 or a reporter protein is also useful for screening an agent that modulates DSP-3 activity. The identified agents that modulate DSP-3 activity are useful for treating Duchenne muscular dystrophy, cancer, graft-versus-host disease, autoimmune diseases, allergies, metabolic diseases, abnormal cell growth, abnormal cell proliferation and cell cycle abnormalties. DSP-3-specific antibodies and DSP-3 antisense probes are useful for detecting DSP-3 expression in a sample. The present sequence represents a human DSP-3 RACE (rapid amplification of cDNA ends) PCR primer used in an exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New dual-specificity phosphatase (DSP)-3 and DSP-3 alternate form polypeptides, useful for identifying modulators DSP-3 or DSP-3 alternate form activity, especially for treating e.g. cancer, autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; DSP-3; cytostatic; immunosuppressive; antiallergic;
dual specificity phosphatase-3; cell proliferation; metabolic disease;
Duchenne muscular dystrophy; cancer; graft-versus-host disease;
autoimmune disease; allergy; RACE; rapid amplification of cDNA ends;
                                                                                                                                                                                                                                     5.0%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 2.8e+02;
                                                                                                                                                                                                       Sequence 21 BP; 4 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human DSP-3 cDNA RACE primer DSP3-SP1.5.
                                                                                                                                                                                                                                                                                                     717 GGAGAGTGACTCTGGTCATAG 737
                                                                                                                                                                                                                                                                                                                                    GGAGCGTGACACTGGTGATCG 1
                                                                                                                                                                                                                                                                                                                                                                                                                      AAF29603 standard; DNA; 21 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JUN-2000; 2000WO-US018207.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0142338P.
2000WO-US009185.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000WO-US010868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                       17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-138149/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CEPT-) CEPTYR INC.
                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Luche RM, Wei B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200102582-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           allergies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-JAN-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF29603;
                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                     2555555555555x8
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                         à
```

ö

Gaps 0;

Indels

```
0
                                                                                                                                                        ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention provides the protein and coding sequences of the human dual-specificity phosphatase DSP-3. The DSP-3 protein is involved in cell signalling and the sequences can be used in the treatment of cancer, metabolic and autoimmune diseases, allergies, graft-versus-host disease, abnormal cell proliferation and Duchenne muscular dystrophy
                                                                                                                                                                                                                                                                                                                                                                                                                   Human; DSP-3; dual-specificity phosphatase; cell proliferation;
cell signalling; cancer; graft-versus-host disease; autoimmune disease;
allergy; metabolic disease; Duchenne muscular dystrophy; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New dual-specificity phosphatase-3 polypeptide and its variants useful for treating disorders associated with DSP-3 activity, defects in cell proliferation, differentiation or survival, e.g. Duchenne muscular
            cell growth, abnormal cell proliferation and cell cycle abnormalities. The modulating agents are useful for modulating, modifying or altering cellular responses, e.g. in vivo or in vitro cell proliferation, differentiation or survival
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
autoimmune diseases, allergies, metabolic diseases, abnormal
                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·.
                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                    Human dual-specificity phosphatase DSP-3 PCR primer DSP3-SP1-5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5.0%; Score 14.6; DB 1; Length 21;
81.0%; Pred. No. 2.8e+02;
iive 0; Mismatches 4; Indels
                                                                                                                          21;
                                                                                                                                                      Indels
                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 21 BP; 4 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                           BP; 4 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                      Score 14.6; DB 1;
Pred. No. 2.8e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGAGAGTGACTCTGGTCATAG 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 46; 70pp; English.
                                                                                                                                                                                        717 GGAGAGTGACTCTGGTCATAG 737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      geaecereacacreerearce 1
                                                                                                                                                                                                                     ggagcgrgacacrggrgarcg 1
                                                                                                                                                                                                                                                                                                 ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-0142338P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-APR-2000; 2000WO-US010868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-APR-2000; 2000WO-US009185
                                                                                                                             5.0%;
                                                                                                                                           81.0%;
                                                                                                                                                                                                                                                                                                 AAF32193 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                           17; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-138148/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
nes 17; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CEPT-) CEPTYR INC
                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 dystrophy, cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wei B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200102581-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                              12-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-JAN-2001.
                                                                                                Sequence 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Luche RM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                               AAF32193;
                                                                                                                             Query Match
                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                  RESULT 86
AAF32193/
                                                                                                                                                                                                                                                                                                                 g
        88888888
                                                                                                                                                                                           ò
```

RESULT 87

The present sequence is given in a specification providing human dual specificity phosphatase-3 (DSP-3) and a murine DSP-3 variant polypeptide. The polypeptides are useful for dephosphorylating a substrate of DSP-3, e.g. MAP-kinase. They may be used to treat or prevent diseases associated with cell proliferation, immunosuppression, metabolic diseases, or abnormal cell growth or cell cycle abnormalities. They are also useful for identifying agents that modulate their activity. The modulators are useful for treating disorders associated with DSP-3 variant activity, e.g. Duchenne muscular dystrophy, cancer, graft-versus-host

Example 1; Page 48; 86pp; English.

PCR primer; ss.

Homo sapiens.

```
The invention relates to a method of modulating angiogenesis in a tissue comprising mammalian cells by modulating pituitary tumour transforming gene (PTTG) expression and/or endogenous PTTG1 protein function in at least one of the cells. The method is useful for enhancing or inhibiting angiogenesis. Specifically, enhancing wound healing and/or tissue regeneration and limiting scar formation. The method is also useful in treating malignant tumours and retinopathy. The present sequence is a PCR primer used for amplifying human PTTG2 DNA which is used for inhibiting PTTG1 biological activity
                                                                                                                                                                                                                                                                                                                                        Human; pituitary tumour transforming gene; PTTC1; vulnerary; cytostatic; ophthalmological; antiangiogenic; antisense gene therapy; angiogenesis; wound healing; tissue regeneration; scar formation; malignant tumour; retinopathy; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Modulating angiogenesis in a tissue comprising mammalian cells by modulating pituitary tumor transforming gene (PTTG1) expression and/or endogenous PTTG1 protein function.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Melmed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Yu R, Horwitz GA, Zhang X,
                                                                                                                                                                                                                                                                Human PTTG2 DNA amplifying reverse PCR primer 2-306R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 0 A; 3 C; 5 G; 13 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 21; Page 100; 183pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CEDA-) CEDARS SINAI MEDICAL CENT.
                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-00687911.
2000US-00730469.
2001US-00777422.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-MAY-2001; 2001WO-US015437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001US-00854326.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-00569956
                                          AAD30126 standard; DNA; 21
                                                                                                                                                                                       17-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ishikawa H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-188148/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200187935-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13-OCT-2000;
04-DEC-2000;
05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Heaney AP,
                                                                                                                      AAD30126;
AAD3 0126

XX
 AAD3

XX
 WOD I

XX
 YOU

XX
 YOU
```

ŝ

ô Gaps 0; 5.0%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 2.8e+02; Indels 0; Mismatches Query Match 5.0 Best Local Similarity 81.0 Matches 17; Conservative

ö

819 GGTTGGCTGTGTCTTTTCT 839

à

21

BP.

ABN87431 standard; DNA; 21

RESULT 89 ABN87431 ABN87431;

1 GCTTGGCTGTTTTGTTTTCT

819 GGTTGGCTGTGTCTTTTCT 839 ð g

1 ścirściriririairici 21

AAD30950 standard; DNA; 21 31-MAY-2002 AAD30950; AAD30950 

RESULT 88

BP.

tumour; cytostatic; PCR primer; ss.

transformation;

Pituitary tumour-specific gene; PTTG1; PTTG2; pituitary tumour transforming gene; malignant neoplastic cellular proliferation inhibition;

WO200187039-A2

Synthetic

22-NOV-2001.

PTTG related PCR primer 2-306R SEQ ID NO:50.

05-AUG-2002 (first entry)

Human PTTG gene amplifying reverse PCR primer, 2-306R.

Human; pituitary tumour transforming gene; cellular transformation; PTTG; inhibition; immunogen; neoplastic cellular proliferation; T-lymphocyte;

```
The patent discloses pituitary tumour transforming gene (PTTG) carboxy terminal peptides. The invention also relates to methods for inhibiting neoplastic cellular proliferation and transformation (NP/T) of mammalian cells. The method involves delivering a composition comprising a PTTG carboxy-terminal-related polynucleotide, an expression vector comprising a pptide to a mammalian cell that overexpresses PTTG. The compositions comprising PTTG-C peptides are useful for inhibiting neoplastic cellular proliferation and/or transformation of a mammalian cell. PTTG-C peptides are useful in bioassays, as immunogens to produce anti-PTTG-C antibodies and in therapeutic compositions. PTTG antibodies are also useful for inhibiting the activation of mammalian T-lymphocytes. Sequences of the invention are used as vaccines and in gene therapy. The present sequence is a PCR primer which is used for amplifying human PTTG gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                  Inhibiting neoplastic cellular proliferation and/or transformation mammalian cell, by using Pituitary tumor transforming gene carboxy-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5.0%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 2.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 0 A; 3 C; 5 G; 13 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                Heaney AP, Melmed S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 21; Page 103; 190pp; English.
                                                                                                                                                                                                                                                                        (CEDA-) CEDARS SINAI MEDICAL CENT
                                                                                                                                                                              12-MAY-2000; 2000US-00569956.
13-OCT-2000; 2000US-00687911.
04-DEC-2000; 2000US-00730469.
05-FEB-2001; 2001US-00777422.
                                                                                                                                            12-MAY-2001; 2001WO-US015254.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 81.0
                                                                                                                                                                                                                                                                                                            Horwitz GA, Zhang X,
                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-226703/28
                                                                                                                                                                                                                                                                                                                                                                                                                      terminal peptides.
                                                                      WO200187934-A2
                                                                                                          22-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
```

oĘ

13-OCT-2000; 2000US-00687911. 04-DEC-2000; 2000US-00730469. 05-FEB-2001; 2001US-00777422.

12-MAY-2000;

11-MAY-2001; 2001US-00854326

12-MAY-2001; 2001WO-US015438

WO200188116-A2.

22-NOV-2001

```
The present invention describes a method for inhibiting neoplastic cellular proliferation and/or transformation of a mammalian cell. The method comprises delivering to a mammalian cell that endogenously over expresses pitutary tumour transforming gene (PTTG1), a composition of comprising, an expression vector comprising a promoter and a comprising, an expression vector comprising a promoter and a comprising a mammalian PTTG2 peptide the polynucleotide being operatively complying a mammalian PTTG2 peptide the polynucleotide being operatively linked to the promoter in a transcriptional unit, where PTTG2 is selected from: (a) a peptide (1) consisting essentially of a 191 amino acid canno acid residues 1-180; or (b) a mammalian PTTG2 peptide having at least 95% sequence bomology with (1). The expression vector is complexed with a cellular uptake-enhancing agent such that the PTTG2 peptide having complexed with a cellular uptake-enhancing agent such that the PTTG2 peptide is cransformation of the cell is inhibited. PTTG2 protein regulates cransformation of the cell is inhibited. PTTG2 protein regulates complexed transformation of the cell is inhibited. PTTG2 peptide molecules have the ability to down regulate PTTG1 gene expression and/or PTTG1 protein cellular proliferation and/or transformation of mammalian cells mainty the method is useful in inhibiting mainty than the properties of the ability to down regulate manner. The method is also useful in inhibiting cells and in vitro. The method is also useful in treating cells and in vitro. The method is also useful in treating consistent entered and and in vitro. The method is also useful in treating cells and the procession and the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    malignant tumours. The present sequence represents a PCR primer which is
                                                                                                                                                                                                                                                                                                                                                                                                   Novel method of inhibiting neoplastic cellular proliferation and/or transformation of a mammalian cell used for treating e.g. malignant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 0 A; 3 C; 5 G; 13 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 21; Page 99; 175pp; English.
                                                                                                                                                                                                                   (CEDA-) CEDARS SINAI MEDICAL CENT.
                                                                                                                                                                                                                                                                                 Prezant TR, Heaney AP, Melmed S;
                                                                                                                     04-DEC-2000, 2000US-00730469.
05-FEB-2001; 2001US-00777422.
                                                             2000US-00569956.
2000US-00687911.
12-MAY-2001; 2001WO-US015255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match

Best Local Similarity 81.0'

---nhes 17; Conservative
                                                                                                                                                                                                                                                                                                                                               WPI; 2002-195496/25
                                                                    12-MAY-2000;
                                                                                                 13-OCT-2000;
```

Gaps ; 5.0%; Score 14.6; DB 1; Length 21; 81.0%; Pred. No. 2.8e+02; Live 0; Mismatches 4; Indels 819 GGTTGGCTGTCTCTTTTCT 839 gerrégerérririerrier 21 ð

ö

ABA98065 standard; DNA; 21 BP 03-MAY-2002 (first entry) ABA98065; RESULT 90 ABA98065 

Human; mouse; rat; cytostatic; immunosuppressive; antiasthmatic; dermatalogical, antirheumatic; antiarthritic; neuroprotective; antirheumatory; antipsoriatic; antiatherosclerotic; antiallergic; r-lymphocyte cell; pituitary tumour transforming gene; PTTG; bFGF; transcription; cell; proliferation; lymphocyte; graft rejection; asthmatic; autoimmune disease; rheumatoid arthritis; leukaemia; cancer; tumour; Hodgkin's disease; PCR primer; ss. Human PTTG2 PCR primer SEQ ID NO 46.

proliferation regulator; differentiation regulator; non-malignant tumour; fumune disorder; autoimmune disease; transplant rejection; allergy; AIDS; infection; inflammatory disorder; arthritis; haematopoietic disorder; skin disorder; cardiovascular disorder; atherosclerosis; restenosis; neurological disorder; atherosclerosis; restenosis; neurological disorder; disease; trauma; wounding; spinal cord injury; skeletal disorder; gvostatic; immunosuppressive; anti-HIV; antinhfammatory; antiarthritic; antiarteriosclerotic; neuroprotective; vulnerary; antiallergic; antimicrobial; cardiant; dermatological; gene therapy; real time quantitative PCR primer; ss.

Human SECX 2777610 real-time quantitative PCR primer, SEQ ID NO:51.

(first entry)

16-JAN-2001

AAA93650;

BP

AAA93650/c ID AAA93650 standard; DNA; 22

protein; human; secreted; membrane-associated; cancer;

Synthetic

```
The invention relates to inhibiting the activation of a mammalian T-
CC lymphocyte cell comprising inhibiting pituitary tumour transforming gene
(PTTG1) expression and/or endogenous PTTG1 protein function in the T-
CC lymphocyte cell; whereby activation of the T-lymphocyte cell is
continuibited. PTTG upregulates bFGF secretion and transactivates DNA
cranscription. Compositions and methods of the invention are useful for
inhibiting neoplastic and non-neoplastic proliferation of mammalian T-
continuibiting neoplastic and non-neoplastic proliferation of mammalian T-
cC lymphocyte cells, including activated normal lymphocytes and transformed
lymphocytes. The compositions and methods are useful in the prevention of
inhibition of xenograft or allograft rejection and in the treatment of
continuint encephalomyelitis, psoriasis, atherosclerosis and other
cc autoimmune diseases. The inventive methods and compositions are also
cuseful in the treatment of T-cell neoplasmes, such as leukaemia, or any
content sequence is that of a PTG related PCR primer, useful in methods
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                          Inhibiting the activation of a mammalian T-lymphocyte cell useful for treating immune-related disorders by inhibiting PTTG1 gene expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Match 5.0%; Score 14.6; DB 1; Length 21; Local Similarity 81.0%; Pred. No. 2.8e+02; es 17; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 0 A; 3 C; 5 G; 13 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                   Zhang X, Melmed S;
                                                                                                                                                                                                                                                                                                                                                                                                       Example 21; Page 103; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     819 GGTTGGCTGTGTCTTTTCT 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                               (CEDA-) CEDARS SINAI MEDICAL CENT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTTGGCTGTTTTTGTTTTCT
                                                                                                                                                                                                                                                                       Stoika R, Horwitz GA,
                                                                                                                                                                                                                                                                                                            WPI; 2002-188151/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 91
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

99US-0123667P

Human SECX associated PCR primer #8.

```
Novel human membrane associated or secreted polypeptides and polynucleotides useful for diagnosis, prevention and treatment of pathological states such as cancer, immune, cardiovascular and neurological disorders.
                                                                                                                                        Example 6; Page 97; 151pp; English.
                                         09-MAR-2000; 2000WO-US006280
                                                          08-MAR-2000; 2000US-0520781P
                                                                       (CURA-) CURAGEN CORP.
                                                                                               WPI; 2000-594318/56.
                 WO200053742-A2.
                                                    09-MAR-1999;
      Homo sapiens
                                                                                  Shimkets RA;
                             14~SEP-2000
```

The invention relates to human SECX proteins (AAB23029-B23048) and to nucleic acids which encode them (AAA3616-A93611, AAA93673-A93666). The SECX proteins of the invention are either secreted or membrane-associated proteins and act as regulator of cellular proliferation and differentiation. SECX proteins or mucleotides are useful for diagnosing the presence of, or predisposition to, a disease associated with altered levels of SECX proteins and nucleotides. The SECX proteins are also useful to screen compounds that modulate SECX activity or expression. The interaction of a SECX protein with other cellular proteins may be useful to modulate the activity of a partner protein, cellular proliferation, cellular differentiation and cell survival. SECX nucleotides are useful for the recombinant expression of SECX gene. They may also be used to modulate SECX expression of SECX gene. They may also be used to modulate secx expression of SECX gene. They may also be used to condulate secx expression (e.g., using antisense oligomucleotides). SECX nucleic acid sequences are also useful for identifying a cell or tissue type in a biological sample, and in forensic biology. SECX primers or probes are useful for detecting the presence of SECX nucleotides and for screening tissue cultures for contamination. Diseases that may be treated or prevented using SECX proteins or nucleotides include cancer (e.g., colorectal carcinoma, prostate cancer), benign tumours, immune disorders (including autoimmune diseases, transplant rejection, allergies, AIDS), inflammatory diseases, transplant rejection, allergies, AIDS), skin disorders, cardiovascular disorders, atherosclerosis, restenosis, skin disorders, cardiovascular disorders, atherosclerosis, restenosis, or traumatic wounds, spinal cord injury), and skeletal disorders. The present sequence represents a PCR primer used in real-time quantitative present analysis of a SECX gene in an exemplification of the Sequence 22 BP; 11 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

; 0 5.0%; Score 14.6; DB 1; Length 22; 81.0%; Pred. No. 3e+02; Live 0; Mismatches 4; Indels Query Match Best Local Similarity 81.00, Thes 17; Conservative

ADA23328 standard; DNA; 22 BP 20-NOV-2003 (first entry) ADA23328; RESULT 92 ADA23328/c axxxax axxxxx

Human; secreted polypeptide; membrane-associated polypeptide; SECX; SEC1; SEC2; SEC3; SEC4; SEC6; SEC6; SEC7; SEC8; SEC9; SEC10; SEC11; SEC12; SEC13; SEC14; SEC14; SEC7 associated disorder; lung cancer; SEC13; SEC14; SEC7 associated disorder; lung cancer; cardiovascular disease; oncology disease; immune disorder; skin disorder; autoimmune disease; transplant rejection; allergy; ALDS; infections; inflammatory disorder; arthritis; haematopoietic disorder; skin disorder; trauma; wounds; spinal cord injury; skeletal disorder; cytostatic; antimiflammatory; immunosuppressive; anti-HIV; antiarthritic; antiarteriosclerotic; cardiant; neuroprotective; nootropic; vulnerary; antiallergic; cardiant; dermatological; PCR; primer; ss. New SECX nucleic acids, useful for treating or diagnosing a disorder e.g., lung cancer, cardiovascular and oncology diseases, immune disorder, and autoimmune disease. 04 JAN-2000; 2000US-0174485P. 08-MAR-2000; 2000US-00520781. 19-SEP-2000; 2000US-0234798P. 20-SEP-2000; 2000US-0234082P. 19-SEP-2001; 2001US-00957187. 99US-0123667P Shimkets RA, Larochelle WJ; ¥.₩ . WPI; 2003-540616/51. SHIMKETS R LAROCHELLE US2003054514-A1. Homo sapiens. 09-MAR-1999; 20-MAR-2003 (/WIHS) (LARO/) 

Example 6; Page 67; 118pp; English

The present invention relates to the isolation of human secreted or membrane-associated (SECX) polypeptides designated SEC1-SEC15, and the polymucleotide sequences encoding them. Also disclosed is a method for screening for a modulator of activity or latency of SECX. The SECX polypeptide and polymucleoride sequences may be used for treating or preventing SECX-associated disorders such as lung cancer, cardiovascular and oncology diseases, immune disorders, autoimmune diseases, transplant rejection, allergy, AIDS, infections, inflammatory disorders, arthritis, haematopoietic disorders, skin disorders, atherosclerosis, restenosis, neurological diseases (e.g. Alzheimer's disease), trauma, wounds, spinal cord injuries, and skeletal disorders. The present sequence represents a PCR primer used in the examples of the present invention.

Sequence 22 BP; 11 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

Gaps ö Score 14.6; DB 1; Length 22; Pred. No. 3e+02; 4; Indels 0; Mismatches Query Match 5.0%; Best Local Similarity 81.0%; 17; Conservative Matches

826 IGTGTCTCTTTTCTCTGA 846

8

.. 0

Gaps

·.

21 rererestrirition BP. AAC70412 standard; DNA; 17 RESULT 93 AAC70412 AXXXXXXX

09-FEB-2001 (first entry)

AAC70412;

```
GTAGGGGCCCAGGGTC 17
             2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        93.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                   activity of human POSHLI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 93.8
hes 15; Conservative
                                                                                                                                                                                                                                                       WPI; 2002-684061/74.
                                                                                                                                                                                         (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-DEC-2002
                                                                                                                                                                                                                          Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABV90404;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABV90404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention is concerned with a number of human single nucleotide polymorphisms (SNPs) which the inventors identified in human genes. These SNPs can be used in disease diagnosis and prediction of an individual's susceptibility to disease, in forensic and paternity testing and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovascular, endocrine and neurological systems, such as coronary artery disease, schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
                              Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                         Lander ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5.0%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 2.3e+02; iive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human POSHL1 scanning oligonucleotide SEQ ID NO 1115.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 3 A; 10 C; 1 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                        Cargill M, Daley GQ, Ireland JS,
Patil N, Sklar P;
 Single nuclectide polymorphism PCR primer #162.
                                                                                                                                                                                                                                                          (WHED ) WHITEHEAD INST BIOMEDICAL RES. (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 8; Fig 5; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                923 CACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV90402 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-JAN-2002; 2002EP-00001165.
                                                                                                                                                                                               30-MAR-2000; 2000WO-US008440.
                                                                                                                                                                                                                              99US-0127248P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 caccaccrcccrccag 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 5.0
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-611722/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                            genetic analysis.
                                                                                                                                   WO200058519-A2.
                                                                                                                                                                                                                                                                                                           Altshuler D,
Lipshutz RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                               31-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-DEC-2002
                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-SEP-2002
                                                                                                                                                                 05-OCT-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABV90402;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diseases
```

RESULT 94 ABV90402

ð

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (SI, ABB8399), a sequence having 65% sequence identity to (SI), (CI) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as commistream components of the signal transduction pathway. (I) is useful of for identifying a specific binding partner. (I) and nucleic acids (II) for identifying a specific binding partner. (I) and nucleic acids (II) conceding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnosing and creating cuseful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of priented specification, but is based on sequence did not form part of the prime by the Buropean Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.0%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 2.3e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; SEQ ID NO 1115; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human POSHL1 scanning oligonucleotide SEQ ID NO 1117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
30-JAN-2201; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
23-MAY-2001; 2001WS-00864761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    744 GIAGGGICCCAGGGIC 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABV90404 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           gene therapy; transgenic; ss.
```

ö

11-SEP-2002

rng.res

Homo sapiens. WO9820165-A2

Synthetic

14-MAY-1998

```
protein 1 (POSHL 1) polypeptide (1), comprising a sequence of 730 amino acids (S1, ABB8399), a sequence having 65% sequence identity to (S1), (S1), and aving 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small Grpases as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding pather. (I) and nucleic acids (II) caused by altered expression of human POSHL including disease and treating cancer, they useful in the development of vaccines and (II) is useful for measuring and for surveying gene expression and creating treating cancer, they useful in the development of vaccines and (II) is useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oil gonucleotide useful in examples of the invention. Note: The present sequence aid not form part of the nerwort hy the Ruranean patent of the horazone by the Ruranean patent of the nerwort of the horazone.
                                                                                                                                                                                                                                                                                                                                                                                                                              Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an isolated SH3 domain (POSH)-like signalling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 2; SEQ ID NO 1117; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Derwent by the European Patent Office
                                                                                                                                                                                   2001WO-US000668.
2001WO-US000669.
2001WO-US000670.
2001US-00864761.
                                                                                                  2001WO-US000664.
2001WO-US000665.
2001WO-US000666.
2001WO-US000667.
                                      28-JAN-2002; 2002EP-00001165
                                                                                                                                                                                                                                                                    10-OCT-2001; 2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-684061/74.
                                                                                                                                                                                                                                                                                                          (AEOM-) AEOMICA INC
                                                                                                  30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                 30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                            23-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                   Shannon M;
```

Gaps . 5.0%; Score 14.4; DB 1; Length 17; 93.8%; Pred. No. 2.3e+02; Live 0; Mismatches 1; Indels Sequence 17 BP; 3 A; 5 C; 7 G; 2 T; 0 U; 0 Other; Query Match
Best Local Similarity 93.8
Matches 15; Conservative

AAX10202; 

AAX10202 standard; DNA; 19 BP

Human biallelic polymorphic marker downstream primer #508.

24-MAR-1999 (first entry)

Polymorphism; biallelic; human; forensic; paternity testing; disease; detection; phenotypic typing; characteristic; infection; hereditary; autoimmune disease; cancer; inflammation; drug; therapy; medicament; treatment; marker; primer; ss.

isolation of various biallelic polymorphic markers found in the human genome (represented in AAX10269-X12937). These primers can be used in approve the property of the primers can be used in a method for determining polymorphic forms in an individual for use in e.g. forensics, paternity testing polymorphic forms in an individual for use in e.g. forensics, paternity testing or for phenotypic typing for use in e.g. forensics, paternity testing or for phenotypic typing for use in e.g. dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial hypercholesterolemia, polycystic kidney disease, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous system, infection by pathogenic microorganisms, and characteristics such system, infection by pathogenic microorganisms, and characteristics such confurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or AAX09121-X10268 are allele-specific oligonucleotide primers used in the Gaps New isolated nucleic acid segments from the human genome - used for determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease. 0; 5.0%; Score 14.4; DB 1; Length 19; 93.8%; Pred. No. 2.7e+02; 1; Indels Sequence 19 BP; 7 A; 3 C; 8 G; 1 T; 0 U; 0 Other; 0; Mismatches (WHED ) WHITEHEAD INST BIOMEDICAL RES. Claim 16; Page 213; 310pp; English. Hudson T; 97WO-US020313. 96US-0030455P. prophylaxis of such diseases Query Match
Best Local Similarity 93.8
Matches 15; Conservative Lander ES, Wang D, WPI; 1998-286974/25. 06-NOV-1996; ò

706 AGCGAGTCCCAGGAGA 721 3 AGCGAGTCCAAGGAGA

셤

0;

RESULT 97

· 0

ACD26260 standard; DNA; 20 BP. 02-SEP-2003 (first entry) ACD26260; ACD26260 

Human, 88; PCR; primer, sequencing; mutation load; p53; cancer risk; cancer therapy. Human p53 sequencing primer #2 Human;

Homo sapiens.

US2003049635-A1

13-MAR-2003.

08-NOV-2001; 2001US-00986381.

Mccarthy JJ;

(WHED ) WHITEHEAD INST BIOMEDICAL RES.

```
08-NOV-2000; 2000US-0246582P
     (CITY ) CITY OF HOPE.
                                                                                                                             WO200118250-A2
                                                                                                                Homo sapiens
                                                                                              06-JUN-2001
                                                                                                                                 15-MAR-2001
                                                                                                                    Key
Variation
                                                                                          AAF95402;
                                                                   Matches
                                                                                  RESULT 98
ð
```

8 Db o; The invention relates to a method of determining mutation load, which involves identifying a somatic cell that contains accumulated levels of p53, amplifying DNA of the p53 gene from such cell and determining the frequency or nature of mutations in the amplified DNA. The method is useful for determining mutation load both in subjects who do not yet exhibit signs of disease and subjects who are presently treated using known cancer therapy to assess efficacy of treatment. The method is also useful to identify missense mutations in single cell from normal colon and prognesis and monitoring the effectiveness of cancer therapy and is useful for monitoring the mutational status of individuals over extended periods of time. The present sequence represents the human p53 sequencing Determining mutation load, by identifying a somatic cell that contains accumulated levels of p53, amplifying DNA of the p53 gene from the cell and determining the frequency or nature of mutations in the amplified Gaps . 0 5.0%; Score 14.4; DB 1; Length 20; 93.8%; Pred. No. 2.9e+02; rive 0; Mismatches 1; Indels Seguence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other; Claim 25; Page 10; 14pp; English. Heinmoller 15; Conservative WPI; 2003-503565/47. Sommer SS, Liu Q,

754 AGGGTCCCTAGGCCTC 769 AGGTCCCAGGCCTC 16 Query Match Best Local Similarity

Human gene single nucleotide polymorphism #163. AAF95402 standard; DNA; 21 BP (first entry)

Human; variant thrombospondin 1; variant thrombospondin 4; SNP; polymorphism; vascular disease; coronary artery disease; forensics; myocardial infarction; atherosclerosis; stroke; venous thromboembolism; pulmonary embolism; paternity test; ds. /standard_name= "single nucleotide polymorphism" Location/Qualifiers replace(11,T)

10-SEP-1999; 99US-0153357P. 26-JUL-2000; 2000US-0220947P. 16-AUG-2000; 2000US-0225724P. 07-SEP-2000; 2000WO-US024503

The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and Daley GQ, Ireland JS, Bolk S, Example; Page 59; 242pp; English. (MILL-) MILLENNIUM PHARM INC. Gargill M, WPI; 2001-226749/23 atherosclerosis. Lander ES,

ö genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocardial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism and pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also useful in forensics, paternity testing, genetic analysis and phenotype correlations to diseases. The present sequence is an example of one of Gaps .; 5.0%; Score 14.4; DB 1; Length 21; 93.8%; Pred. No. 3e+02; Live 0; Mismatches 1; Indels Sequence 21 BP; 6 A; 11 C; 2 G; 2 T; 0 U; 0 Other; the human gene SNPS shown in the specification 920 CATCACCACCACCTC 935 

CATCACCACACTC 21 9 ABA03892/c RESULT 99

BP.

22

ABA03892 standard; DNA;

(first entry)

14-FEB-2002

ABA03892;

Human; POLYX; gamma aminobutyric acid receptor; GABA receptor; hepidermal growth factor; BGF; complement receptor; HSPC; syntaxin; haematopoietic stem and progenitor cell; sulphotransferase; prohibitin; antidepressant; cerebroprotective; antiparkinsonian; nootropic; relaxant; anticonvulsant; neuroleptic, neuroprotective; antialcoholic; cardiant; tranquilliser; antiarrhythmic; psychiatric; medical; depression; stroke; parkinson's disease; huntington's disease; Tourette's syndrome; anxiety; amyotrophic lateral sollerosis; head trauma; Alzheimer's disease; ss; alcoholism; vigilance; muscle tension; epileptogenic; memory function; cardiomyopathy; arrhythmogenic right ventricular dysplasia; PCR primer. Human POLY11 PCR primer SEQ ID NO:48. 20-APR-2000; 2000US-0198645P. 25-APR-2000; 2000US-0199476P. 26-APR-2000; 2000US-0199880P. 26-APR-2000; 2000US-0200024P. 26-APR-2000; 2000US-0200025P. 09-JUN-2000; 2000US-0200025P. 2000US-0198293P. 19-APR-2001; 2001WO-US012854 WO200179294-A2 19-APR-2000; Homo sapiens 25-OCT-2001. 

```
The present invention describes polypeptides (I), designated POLYX polypeptides (e.g. POLYI, POLY2, etc.), and the polynucleotide sequences (II) encoding them. POLY1-4 are members of the gamma aminobutyric acid factor (EGF) family; POLY5-8 are members of the epidermal growth factor (EGF) family; POLY9-11 are members of the complement receptor (HSPC) family; POLY13 is a member of the Naphotansferase family; POLY13 is a member of the supporter sequence (HSPC) family; POLY13 is a member of the prophosition family; POLY14 is a member of the supporter of the systexin family; and POLY17 is a member of the prohibitin family. (I) and (II) can have antidepressant, anticonvulsant, neuroleptic, neuroprotective, antialcoholic, cardiant, tranquilliser and antiarrhythmic activities. (I) and (II) can be used for treating or preventing a POLYX-associated disconder in humans as a therapeutic in the preventing are polymerated the presenting as a convision of the preventing and polymerate and preventing a POLYX-associated disconder in humans as a therapeutic in the
                                                                                                                                                                                                                                                                                                        New isolated polypeptides for treating a broad range of pathological states, e.g., depression, stroke, Parkinson's disease, Huntington's disease, Tourette's syndrome, amyotrophic lateral sclerosis, head trauma,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            anxiety, muscle tension, epileptogenic activity and memory functions, cardiomyopathy and arrhythmogenic right ventricular dysplasia. The present sequence represents a PCR primer used in the expression of POLY11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       pathological state in a mammal, especially patients suffering from, e.g., psychiatric and medical conditions, depression, stroke, Parkinson's disease, Huntington's disease, Tourette's syndrome, amyotrophic lateral sclerosis, head trauma, Alzheimer's disease, alcoholism, vigilance,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        manufacture of a medicament for treating a syndrome associated with a human disease selected from a POLXX-associated disorder, for treating a
                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 5; Page 142; 155pp; English.
  2000US-0218591P.
2000US-0224610P.
2001US-0267673P.
                                                                            27-FEB-2001; 2001US-0271814P
                                                                                                                                                                              Vernet CAM,
Colman SD,
                                                                                                                               (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                         WPI; 2002-017601/02
                                                                                                                                                                                                                                                                                                                                                             disease, Tourett
and Alzheimer's.
                             11-AUG-2000;
                                                                                                                                                                              Taupier RJ,
Padigaru M,
```

ö 5.0%; Score 14.4; DB 1; Length 22; 93.8%; Pred. No. 3.2e+02; tive 0; Mismatches 1; Indels Sequence 22 BP; 6 A; 8 C; 3 G; 5 T; 0 U; 0 Other; Conservative Query Match Best Local Similarity Matches 15; Conserv

ö

Gaps

744 GIAGGICCCAGGGIC 759 GTAGGGTCCAAGGGTC 16

ABX56488 standard; DNA; 22 (first entry) 17-FEB-2003 ABX56488; ABX56488/c 

epileptogenic activity; memory; cardiomyopathy; cancer; angiogenesis; arrhythmogenic right ventricular dysplasia; renal disease; diabetes; Epidermal growth factor like protein; levkaemda; lupus; anaemia; ulcer; haematopoietic stem and progenitor cell like protein; cirrhosis; sulfotransferase-like protein; cholangitis; hepatitis; hyperthyroidism; developmental disorder; Syntaxin-like protein; myxoid liposarcoma; Gamma-aminobutyic acid receptor-like protein; depression; stroke; GABA receptor-like protein; Parkinson's disease; Huntington's disease; Tourette's syndrome; amyotrophic lateral sclerosis; head trauma; Alzheimer's disease; alcoholism; vigilance; anxiety; muscle tension; Human complement receptor-like protein reverse PCR primer.

myasthenic syndrome; acute myeloidleukaemia; PCR; primer; ss. 03-JUL-2001; 2001US-00898570. 2000US-0198645P 2000US-0199476P 2000US-0199880P 2000US-0200024P 2000US-0200025P 2000US-0210809P 2000US-0215855P 17-JUL-2000; 2000US-0218591P 11-AUG-2000; 2000US-0224610P 27-FEB-2001; 2001US-0271814P. asthma; Lambert-Eaton transgenic animal; US2002123612-A1. 26-APR-2000; 26-APR-2000; 209-JUN-2000; 2 Homo sapiens. 25-APR-2000; 26-APR-2000; 03-JUL-2000; 19-APR-2000; 

Shimkets RA, Majumder K; Spytek KA, Burgess CE, Liu X;

Fernandes E, Zerhusen BD,

Smithson G; Macdougall JR, Ellerman K, WPI; 2003-066815/06. Gerlach

MACDOUGALL J GERLACH V L.

SMITHSON G.

(MACD/)

ELLERMAN K.

(GERL/) ELLE/ Novel polypeptides and nucleic acids which are members of epidermal growth factor, complement receptor families for diagnosing and treating psychiatric conditions, depression, stroke, Alzheimer's and Parkinson's

Example 6; Page 84; 91pp; English.

The invention describes an isolated POLXX (POLY1-17) polypeptide and its variant. POLYX polypeptides (especially POLY5, POLY6 and POLY7), the bordy variant. POLYX polypeptides (especially POLY5, POLY6 and POLY7), the useful for treating or preventing a pathology associated with POLYX dispeptide in humans and for treating a syndrome associated with human disease. POLYX polypeptide is also useful for identifying an agent that collected to aberrant of personner or physiological interactions of the polypeptide (III) is expression or physiological interactions of the polypeptide (III) is useful for treating a pathological state in a mammal and for determining the presence or amount of POLYX in a sample. POLY1-4 (GABA receptor-like presence or amount of POLYX in a sample. POLY1-4 (GABA receptor-like presence or amount of POLYX in a sample. POLY1-4 (GABA receptor-like proteins) are useful for the treatment of psychiatric and medical conditions, depression, stroke, parkinson's disease, Huntington's disease. Tourette's syndrome, amyotrophic lateral sclerosis, head trauma, epileptogenic activity and memory functions, cardiomyopathy and standard adiabates. DoLY5-8 (Epidermal growth epileptogenic activity and memory functions, cardiomyopathy and expoteins) may be useful for treatment of lenkaemia, and grogenesis, renal disease and diabetes. POLY12 (haematopoietic stem and developmental disorders. POLY14-16 (Syntexin-like proteins) may be useful for treatment of Lambert-Eaton myasthenic syndrome, asthma, mixotic in treatment of Lambert-Eaton myasthenic syndrome, asthma, mixotic in treatment of Lambert-Eaton myasthenic syndrome, asthma, mixotic in modulators of POLY3 (POLYX protein and for identifying and be useful for producing normand/or activity of POLYX protein activity. This sequence represents a POR prime the invention and variance of polyx protein activity. This sequence represents a POR

Sequence 22 BP; 6 A; 8 C; 3 G; 5 T; 0 U; 0 Other;

ö

Gaps

; 0

Length 22; Indels

Matches

ä d AAD58975;

```
This sequence represents a primer used to analyse the human endogenous retrovirus (HERV) W genome (AAX25665). Nucleic acids, their fragments or peptides encoded by them derived from the HERV-W genome are markers of autoimmune disease (e.g. multiple sclerosis, rheumatoid polyarthritis, disseminated lupus erythematosus, insulin-dependent diabetes and related atthologies) and of abnormal or unsuccessful pregnancy and can be used as chromosomal markers for susceptibility to these conditions, or proximity markers of genes associated with this susceptibility
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acid sequences from human endogenous retrovirus-W - expressed exclusively in placenta and useful in diagnosis and therapy of autoimmune disease, and abnormal or failed pregnancy.
                                                                                                                                                                                                                                                                                                                                        Clone; human endogenous retrovirus; genome; autoimmune disease; primer; multiple sclerosis; rheumatoid polyarthritis; insulin-dependent diabetes; disseminated lupus erythematosus; pregnancy; chromosomal marker; PCR; amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.9%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 3.18+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
5.0%; Score 14.4; DB 1;
93.8%; Pred. No. 3.2e+02;
cive 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                          Human endogenous retrovirus W primer POL5145.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mandrand B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 5; Page 87; 106pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                734 ATAGGACTTGGTAGGGTCC 752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bouton O,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                          759
                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19 AAATGACTGGGTAGGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97FR-00008815
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human endogenous retrovirus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ02226/c
ID AAZ02226 standard; DNA; 20
                                                                                                                                                                                                  20
                                                                                                                                                                                                                                                                         (first entry)
                                                                          744 GIAGGGICCCAGGGIC
                                                                                                             GTAGGGTCCAAGGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
     Query Match
Best Local Similarity 93.8
Matches 15; Conservative
                                                                                                                                                                                                  AAX25676 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Blond J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-120897/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (INMR ) BIO MERIEUX
                                                                                                                                                                                                                                                                         21-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9902696-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Simi
Matches 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Beseme F,
                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ02226;
                                                                                                                                                                                                                                       AAX25676;
                                                                                                             16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 103
                                                                                                                                                                   RESULT 102
                                                                                                                                                                                     AAX25676/c
                                                                                                                                                                                                                                         g
                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to new POLYX nucleic acid useful for preparing a composition for treating or preventing tumour or inflammatory disorder. The invention is useful as vaccine and in gene therapy. The nucleic acid is useful for preparing a composition for treating or preventing e.g., tumour or inflammatory disorder. The present sequence is human PCR primer for the expression of POLY11 DNA
                                            .;
0
                                                                                                                                                                                                                                                                                                                                                 inflammatory disorder; vaccine; gene therapy; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New POLYX nucleic acid, useful for preparing a composition for treating or preventing e.g., tumor or inflammatory disorder.
                                            Gaps
                                            .;
0
                                                                                                                                                                                                                                                                                                              Human PCR primer Ag 373 (R) for the expression of POLY11 DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vernet CAM
       5.0%; Score 14.4; DB 1; Length 22; 93.8%; Pred. No. 3.2e+02; cive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Burgess CE,
Majumder K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 22 BP; 6 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Spytek KA,
A, Liu X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 5; Page 71; 75pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0198645P.
2000US-0199476P.
2000US-0199880P.
2000US-0200024P.
2000US-0200025P.
2000US-0210899P.
                                                                                                                                                                                                             BP.
                                                                                 744 GIAGGETCCCAGGGTC 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0224610P.
2001US-0271814P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-APR-2001; 2001US-00839446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Padigaru M, Sp
, Shimkets RA,
                                                                                                                                                                                                            AAD58975 standard; DNA; 22
                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                    16 GTAGGGTCCAAGGGTC
                                                15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPYTEK K A.
BURGESS C E.
VERNET C A M.
FERNANDES E R.
                                                                                                                                                                                                                                                                                                                                                                       POLY11; PCR; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAJUMDER K.
COLMAN S D.
ZERHUSEN B D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SHIMKETS R A.
LIU X.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-605764/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAUPIER R J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PADIGARU M.
            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Taupier RJ, Pac
                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003050232-A1
                                                                                                                                                                                                                                                                                                                                                       tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-APR-2000;
26-APR-2000;
26-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-JUL-2000;
11-AUG-2000;
27-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-APR-2000;
20-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zerhusen BD;
                                                                                                                                                                                                                                                                                  18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-MAR-2003
```

(SHIM/) (LIUX/) (MAJU/)

(FERN/) (VERN/) BURG/

(ZERH/)

TAUP/)

PADI/) (SPYT/) 0;

Gaps

; 0

07-0CT-1999 (first entry)

WO9927105-A2

```
Vaccine; eye disease; conventional trachoma; nonendemic trachoma; paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis; nongonococcal uretritis; epidymitis; cervicitis; salpinigitis; PCR primer; bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primers AAZ01426-Z06209 were used to amplify open reading frames cocke by the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAX36794-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion epidymitis, genital diseases such as nongonococcal uretritis, epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis, menococcal broad trachomatical and veneral lymphographlomatosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; neutralising epitope; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the polypeptides of the invention may be of use in treating these
                             PCR primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer used to amplify an ORF of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 8 A; 3 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Senome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 1507; 1755pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      890 CTTACTTCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX94789 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16; Conservative
                                                                                                                                                          Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-371125/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                      (GEST ) GENSET
                                                                                                                                                                                                                                                     27-NOV-1998;
                                                                                                                                                                                          WO9928475-A2
                                                                                                                                                                                                                                                                                       28-NOV-1997;
                                                                                                                                                                                                                                                                                                       17-DEC-1997;
                                                                                                                                                                                                                                                                                                                    04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-SEP-1999
                                                                                                                                                                                                                       10-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                     Griffais R;
                                                                                                                                             Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
```

97FR-00015041. 97FR-00016034. 98US-0107077P.

98WO-IB001939.

```
ö
                                                                                                                                                                                                                                                                                    AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae (see AAX91990). C. pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyngitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAX94884- AAX98979) can be used in immunogenic compositions as vaccines. Vectors containing C. pneumoniae process of the compositions as a seed of mucleotides sequences can also be used as immunogenic compositions,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antisense oligonucleotide; phosphorothioate; TNFalpha; cytokine; inhibit; tumour necrosis factor alpha; inflammatory bowel disease; diabetes; rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis; pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                              especially where the vector directs the expression of a neutralising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.9%; Score 14.2; DB 1; Length 20; 34.2%; Pred. No. 3.1e+02; Ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human TNFalpha antisense oligonucleotide ISIS# 104750.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Butler MM, Shanahan WJ;
                                                                                                                                                                                                                           Genome sequence of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                         Page 1697; Disclosure; 1912pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    928 CCACCCTCCAGAGAATTTT 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCATCCTCCGGAGTATTT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA41105 standard; DNA; 20 BP
                                                         98WO-IB001890.
                                                                                       97FR-00014673.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-00166186
99US-00313932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                           epitope of C. pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             inflammatory disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                WPI; 1999-357842/30.
                                                                                                                                   (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40200020645-A1
                                                         20-NOV-1998;
                                                                                                       04-NOV-1998;
                            03-JUN-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-OCT-1998;
18-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-AUG-2000
                                                                                                                                                                  Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA41105;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAA41105,
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
```

0;

Gaps

· 0

3; Indels

Length 20;

4.9%; Score 14.2; DB 1; 84.2%; Pred. No. 3.1e+02; ative 0; Mismatches 3;

Ŋ

(first entry)

Synthetic. Chlamydophila pneumoniae.

```
Assay for detecting predisposition or aggressive nature of gastrointestinal cancer particularly colorectal cancer.
                                                                                                                                                                                                                                                                                 98GB-00014213,
                                                                                                                                                                                                                                                                                                   Guilloù PJ;
                                                                                                                                                                                                                                                                                                           WPI; 2000-182121/16.
                                                                                                                                                 Local Similarity
es 16; Conserv
                                                                                                                                                                                                                                                                                          (UYLE-) UNIV LEEDS.
                                                                                                                                                                                                                                                       WO200001847-A1.
                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                         24-JUN-1999;
                                                                                                                                                                                                                                                                                 01-JUL-1998;
                                                                                                                                                                                                               02-JUN-2000
                                                                                                                                                                                                                                                               13-JAN-2000
                                                                                                                                                                                                                                                                                                   Markham AF,
                                                                                                                                                                                                      AAZ91904;
                                                                                                                                                                       13
                                                                                                                                              Query Match
                                                                                                                                                                                     RESULT 106
                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                          AAZ91904
                                                                                                                                                                                              g
à
```

```
This sequence represents a PCR primer for the Survivin gene. The invention relates to an assay system for identifying the product or products of, in combination, the parcreas regenerating gene (REG) and the survivin gene (an anti-apoptosis gene) for determining the tendency of a Survivin gene (an anti-apoptosis gene) for determining the rendency of a caristing cancer. The assay determines the tendency of a tissue to become cancerous or the aggressive nature of an anti-apoptosis gene. The assay determines the tendency of a tissue to become cancerous or the aggressive nature of cancer tissue by using the gene products of the REG and Survivin genes. It is also used for diagnosing a patient, preferably having colorectal cancer for adjuvant therapy. These combined marker genes (REG and Survivin) are also used for screening individuals for clinical trial to detect drug efficacy. The assay individuals for clinical trial to detect drug efficacy. The assay individuals for clinical trial to detect drug efficacy. The assay individuals for clinical trial to detect drug efficacy. The assay cancer for any action of the aggressive nature of other cancers can be identified and thus allows significant development in the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 2 A; 7 C; 3 G; 8 T; 0 U; 0 Other;
Disclosure; Page 11; 29pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      887 GCACTIACTICICAGCTIC 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GCACTTTCTTCGCAGTTTC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA93137 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.9
Best Local Similarity 84.2
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              these patients
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA93137;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA93137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       dd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                This sequence represents an antisense oligomucleotide sequence which targets a region of the human tumour necrosis factor alpha (TNPalpha)

targets a region of the human tumour necrosis factor alpha (TNPalpha)

mucleotide sequence. Trisipha is an important cytokine that plays a role

in host defence. It is produced mainly in macrophages and monocytes in

response to infection, invasion, injury or inflammation. Overexpression

of TNPalpha can result in disease states, particularly in infectious,

inflammatory and autoimmune diseases. The invention relates to antisense

oligonucleotides, such as that represented by the present sequence which

are capable of modulating the TNPalpha gene expression. The

oligonucleotides optionally have a phosphorotholoate backbone, and may

calso optionally contain at least one 2'-O-methoxyethyl modification. The

oligonucleotides are useful for modulating the expression of human

coligonucleotides are useful for modulating a human cell inflammatory

response reducing the blood glucose level in a human and treating a

thuman having a disease or condition associated with TNPalpha. Examples of

diseases associated with TNPalpha include diabetes, inflammatory

diseases associated with TNPalpha include diabetes, inflammatory bowel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primer; Survivin; REG; pancreas regenerating gene; colorectal cancer; anti-apoptosis gene; cancer; diagnosis; marker gene; therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      disease, multiple sclerosis, pancreatitis, rheumatoid arthritis, infectious disease, hepatitis, atopic dermatitis or allograft rejection. The antisense oligonucleotides are also useful for modulating the function of a selected nucleic acid sequence in adipose tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                    Oligonuclectide for treating diseases associated with human tumor necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid arthritis, comprises nucleotide sequence complementary to intron of nucleic acid encoding TNF-alpha.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.9%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 3.1e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 4 A; 3 C; 3 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                               Example 22; Page 103; 283pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             939 AGAATTTTACGCAAGAAGA 957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-GB001877.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR primer for Survivin gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAACTTTAAGCAACAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ91904 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
           WPI; 2000-303808/26.
```

BP.

(first entry)

ö

· 0

4.9%; Score 14.2; DB 1; Length 20; 44.2%; Pred. No. 3.1e+02; ve 0; Mismatches 3; Indels

84.2%;

```
New secreted proteins and polynucleotides encoding them, which are derived from Homosapiens, useful for therapy, diagnosis, and research, as well as nutritional sources or supplements.
                                         Human secreted protein; cytokine; cell proliferation;
nutritional supplement; immune modulation; autoimmune disorder;
haematopoiesis regulation; tissue growth; haemostasis; inflammation;
  68.
Clone vc65_1 secreted protein coding sequence probe SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rapiejko
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hall J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 291; 309pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hoffman H,
                                                                                                                                                                                                                                                                                                                                                                             99US-0120680P.
99US-00298733.
99US-0149639P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0155686P.
99US-0157247P.
99US-0167822P.
                                                                                                                                                                                                                                                                                                                                2000WO-US004340.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0167823P,
2000US-0182711P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Valenzuela D, Yuan O,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ALPH-) ALPHAGENE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-549267/50.
                                                                                                                                                                                                                                WO200049134-A1.
                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                18-FEB-2000;
```

```
The present invention is concerned with a number of secreted proteins and their coding sequences isolated from various human cDNA libraries. The probes shown in the specification (AAA93132-A93156) can be used to obtain the cloned sequences from bacterial cells. The proteins and coding sequences from bacterial cells. The proteins and coding sequences can be used in the isolation of similar genes and proteins, in conditions. It is possible that they may have uses as mutritional supplements, as cytokine or cell proliferation factors, in immune modulation, where they may be used to treat immune and autoimmune diseases, as haematopoiesis regulators (treating myeloid or lymphoid cell deficiencies), in the promotion of tissue growth, they may have chemokine or chemotactic activity, haemostatic or thrombolytic activity, or anti-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                clones. 830 cDNA molecules encoding a human procein have been isolated and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have been determined. Primers for synthesising the full length cDNA are useful for clarifying the function of the protein encoded by the cDNA. The full length clones were obtained by construction of full length enriched cDNA libraries that were synthesised by the oligo-capping method. The primers enable the production of the full length cDNA easily without any special methods. The present sequence is a primer used to amplify a human cDNA encoded.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      synthesizing full length cDNA clones and their use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; full length cDNA; cDNA synthesis; oligo-capping; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to primers for synthesising full length cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ishii S, Kawai Y;
S, Otsuki T, Koga H;
                                                                                                                                                                                                                                                                                                                          4.9%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                  3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 18; Page 129; 1380pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human cDNA clone-specific primer, SEQ ID NO: 4281.
                                                                                                                                                                                                                                                                                    Sequence 20 BP; 3 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        kawa T, Isogai T, Hayashi K, Isl
Sugiyama T, Nagai K, Kojima S,
                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                      803 CTCTCCTCCAACTCAGGGT 821
                                                                                                                                                                                                                                                                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           clone provided in the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                CICAGCICCAICICAGGGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99JP-00194486.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-JUL-2000; 2000EP-00114089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000JP-00118774
2000JP-00183765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAK95036 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                            Local Similarity 84.2
es 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  830 Primers useful for s
in genetic manipulation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (HELI-) HELIX RES INST.
                                                                                                                                                                                                                                                inflammatory activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nishikawa T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-524255/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wakamatsu A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-JUL-1999;
11-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EP1130094-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-SEP-2001,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAK95036;
                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ota T,
                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAK95036/c
à
```

```
;;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This invention relates to a method for recording genetic analysis data in relation to specific gene. The method comprises analysing the occurrence of changes in the base sequence of a gene compared to a standard gene sequence, and recording the distinguishing and analytical data about the gene by an optical method. The method is an efficient, automatic and accurate way of processing genetic analysis data without compromising patient privacy, for determining the occurrence of mutations and their relationship to diseases and morbidity, responsiveness to drugs, the occurrence of drug side-effects, and other relationships. The present sequence represents a PCR primer used to amplify the human NAT2 DNA sequence in an example illustrating the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Method for optical recording of genetic analysis data for efficient processing of genetic variations without compromising patient privacy.
                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                              Score 14.2; DB 1; Length 20; Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 14.2; DB 1; Length 20;
Pred. No. 3.1e+02;
0; Mismatches 3; Indels
                                                               Indels
                                                                                                                                                                                                                                                                                                PCR primer used for amplification of human NAT2 DNA.
                                                                                                                                                                                                                                                                                                                               Genetic data analysis; PCR primer; human; NAT2; ss.
20 BP; 11 A; 1 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 3 A; 8 C; 1 G; 8 T; 0 U; 0 Other;
                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 5; Page 25; 50pp; Japanese.
                                                                                           825 CTGTGTCTTTTTCTCT 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            890 CITACITCICAGCITCIGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19
                                                                                                                        crricicrcarricircec 1
                                                                                                                                                                                                    AAF62076 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-AUG-2000; 2000WO-JP005196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99JP-00222501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTAATTCTCATCTCCTGC
                                             84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TAKE ) TAKEDA CHEM IND LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABL59021 standard; DNA; 20
                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 84.2
Matches 16; Conservative
                                                             16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-191582/19.
                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                         WO200111533-A1
                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-AUG-1999;
                                                                                                                                                                                                                                                                 04-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                        15-FEB-2001
 Sequence
                                                                                                                        19
                                                                                                                                                                                                                                   AAF62076;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fujino M;
                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABL59021;
                                                                                                                                                                      RESULT 109
                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABL59021
                                                                                                                                                                                       AAF6207
                                                                                           ð
                                                                                                                        q
                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AXXXX
```

ö

Gaps

.; 0

```
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACD05333,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents an oligonucleotide which targets polynucleotides encoding human aurora 2 kinase. The oligonucleotide inhibits aurora 2 kinase expression. The oligonucleotide is useful in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, antisense; lung dysfunction, nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                             New oligonucleotide targets and inhibits human aurora 2 kinase mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Aguilar D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .:
                                       Nucleotide sequence of a human aurora 2 kinase inhibitor sas07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.9%; Score 14.2; DB 1; Length 20; ilarity 84.2%; Pred. No. 3.1e+02; Conservative 0; Mismatcher
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fabalan J,
                                                                              Aurora 2 kinase; aurora 2 kinase inhibitor; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 5 A; 4 C; 5 G; 6 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   diagnosis and treatment of cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure, Fig 1; 12pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               860 GCTCCAGTTGGAACACTTT 878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sandrasagra A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human oligonucleotide sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (EPIG-) EPIGENESIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                                       22-SEP-2000; 2000JP-00287928.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20 GCACCACTIGGAACAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-APR-2001; 2001US-0286137P
                                                                                                                                                                                                                                                                            22-SEP-2000; 2000JP-00287928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABZ90449 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
  (first entry)
                                                                                                                                                                                                                                                                                                                      (TANB ) TT PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Li Y, Sar
Tang L,
                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-439988/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-229219/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
es 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200285308-A2
                                                                                                                                                            JP2002095479-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens.
                                                                                                                       Homo sapiens.
    20-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-0CT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              31-OCT-2002
                                                                                                                                                                                                   02-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nyce JW, I
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABZ90449;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    qq
    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THE STATE OF THE S
```

```
first active agent comprising an objective antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 mucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising and/or cantinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, communosuppressive, and cytostatic activity. The composition may have a cuse in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or mallignant cisease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an entinflammatory steroid in a subject, for reducing levels of adenosine or receptor, producing bronchodilation, increasing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject, st issue, or treating bronchoconstriction, continued in inflammation, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tumour necrosis factor alpha; TNF-alpha; antiinflammatory; antirheumatic; antidiabetic; dermatological; hepatotropic; antidasthmatic; inflammatory bowel disease; Crohn's disease; colitis; rheumatorid arthritis; diabetes; pancreatitis; multiple sclerosis; atopic dermatitis; asthma; hepatitis;
Pharmaceutical composition for treating ailments associated with impaired
                                                                                                                                                                                                                                           The invention relates to a novel pharmaceutical composition, which has a
                                       respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tumour necrosis factor alpha antisense oligonucleotide #336.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 3 A; 10 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 14.2; DB 1;
Pred. No. 3.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                           Disclosure; SEQ ID NO 5691; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             769 CCACTICIGAGGCCAGCCC 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cccciacidadeccadece 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-APR-2001; 2001US-00824322.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-00166186.
99US-00313932.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACD05333 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antisense technology; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BAKER B F.
BENNETT C F.
BUTLER M M.
SHANAHAN W R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003022848-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .8-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACD05333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (BENN/)
(BUTL/)
(SHAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BAKE/)
```

```
Treating inflammatory disorders such as inflammatory bowel disease, Crohn's disease or rheumatoid arthritis, in a subject, by administering oligonucleotide which inhibits expression of human tumor necrosis factor
                                                                                                                                                                                                                                                          The invention describes a method of treating an inflammatory disorder in an individual, comprising administering to the individual an oligonucleotide upto 30 nucleotides in length complementary to a nucleic acid molecule encoding human tumor necrosis factor (TNF)-alpha. The method is useful for treating an inflammatory disorder such as inflammatory bowel disease, Crohn's disease, colitis or rheumatoid arthritis, in an individual. The method is also useful for treating diabetes, pancreatitis, multiple sclerosis, atopic dermatitis, asthma, and hepatitis in an individual. This sequence represents an antisense oligonucleotide used to modulate expression of tumour necrosis factor
     Shanahan WR;
                                                                                                                                                                                                                Example 24; Page 39; 142pp; English
Baker BF, Bennett CF, Butler MM,
                                               WPI; 2003-447433/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             alpha (TNF-alpha)
```

4.9%; Score 14.2; DB 1; Length 20; 84.2%; Pred. No. 3.1e+02; ative 0; Mismatches 3; Indels Sequence 20 BP; 4 A; 3 C; 3 G; 10 T; 0 U; 0 Other; 957 939 AGAATTTTACGCAAGAAGA Conservative Query Match Best Local Similarity Matches 16; Conserv

19 AGAACTTTAAGCAACAAGA 1 셤

14-MAY-1997 AAT47823; RESULT 113 AAT47823

BP.

PCR primer, 3m4, for human tumour 86-20-derived NF2 gene. AAT47823 standard; cDNA; 21 (first entry) 

NF2; neurofibromatosis type 2; multiple tumours; nervous system;

bilateral vestibular schwannoma; acoustic neuroma; cranial nerve; meningioma; lens opacity; chromosome region 22q12; tumour suppressor; merlin; moesin-erzin-radixin like protein; alternative splicing; diagnosis; cancer; neoplasia; autosomal; dominant; hereditary; PCR; polymerase chain reaction; ss

Synthetic.

US5578462-A

26-NOV-1996

94US-00179738

10-JAN-1994;

94US-00179738 10-JAN-1994; BRIM ) BRISTOL-MYERS SQUIBB CO

Kley NA;

Seizinger BR,

Bianchi AB,

WPI; 1997-020406/02

New isolated mouse and human NF2 transcript isoforms - used to develop prods. for the diagnosis and treatment of neurofibromatosis type 2  $\,$ diseases

Disclosure; Col 14; 46pp; English

```
AAT47816-T47827 are PCR primers used for the isolation of the NF2 (neurofibromatosis type 2) gene from various human tumours. NF2 is an autosomal, dominantly inherited disorder characterised by multiple tumours of the central nervous system, predominantly bilateral vestibular schwannomas (acoustic neuromas) of the eighth cranial nerve. Other symptoms of NF2 include cranial meningiomas, spinal nerve root schwannomas and presential lens opacities. The NF2 gene, mapped to chromosomal region 22q12 between the loci D2251 and D22528, acts a tumour suppressor. The NF2 gene is alternatively spliced resulting in three chromosomal regions encoding three different proteins, merlin isoforms I III, which are likely to have differing functions. Merlin stands for moesin-ezrin-radixin like protein, so called due to substantial homology with these three proteins. The NF2 gene isoforms and proteins encoded by them, are useful in diagnosing NF2 disease. Merlin protein some
                                                                                                                                                                                                                                                                                                                                                                                                                                                   as tumour suppressors and can be used to suppress tumour growth, as can the cDNA sequence in gene therapy applications. Antibodies raised against merlin proteins are useful as tumour targetting agents
```

Sequence 21 BP; 1 A; 9 C; 5 G; 6 T; 0 U; 0 Other;

Gaps . 0 4.9%; Score 14.2; DB 1; Length 21; 34.2%; Pred. No. 3.3e+02; 3; Indels 0; Mismatches 84.2%; Conservative Similarity Ma. Local S... 16; Query Match Matches

·,

8 g

ö

Gaps

0;

AAV49762 standard; DNA; 21 (first entry) 23-OCT-1998 AAV49762; RESULT 114 AAV49762

BP

Chicken HMGI-c microsatellite marker MCW297 PCR primer 2.

Autosomal dwarfism; poultry; HMGI-c; chicken; detection; pygmy; breeding; broiler; microsatellite; PCR primer; ss.

Gallus gallus. Synthetic

WO9830689-A1.

12-JAN-1998; 16-JUL-1998.

97EP-00200070. 10-JAN-1997; 

98WO-NL000021.

(EURI-) EURIBRID BV

Albers GAA; Groenen MAM,

WPI; 1998-399138/34

Nucleic acid associated with autosomal dwarfism in poultry - localised close to micro-satellite marker LEI146 on chromosome 1, useful e.g. to produce probes to identify homozygous birds for breeding.

Disclosure; Fig 2; 53pp; English

AAV49739-V4976B are PCR primers used in the amplification of microsatellite markers around a novel HWGI-c protein isolated from chicken which is associated with autosomal dwarfism in poultry and can be used to produce probes for detecting alleles of a gene responsible for autosomal dwarfism. The Hmgi-c gene is responsible for the pygmy trait in mice and is also present (although not associated with a dwarf syndrome) in humans, and was identified as a likely candidate for the autosomal dwarfism gene in chickens. Probes or microsatellite markers may thus be

primer for Tumour antigen antibody light chain CDR clone.

(first entry)

16-JUN-1999

PCR

AAX28247;

AAX28247 standard; DNA; 21 BP.

RESULT 116

AAX28247

```
ô
                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes neurofibromatosis type 2 (NF2) transcript isoforms. NF2 polynucleotides can be used for diagnosing NF2 diseases, for inhibiting growth of tumnours associated with NF2 mutations (including expression from cDNA introduced in gene therapy vectors) and to raise antibodies (useful as tumour targeting agents, since specific isoforms are often tumour-specific) and as immunoassay reagents for detecting NF2-expression products. NF2 is a tumour suppressor protein, and so has anticancer activity. The present sequence represents a PCR primer for mouse NF2, from an example of the present invention
select birds which are homozygous/heterozygous for the autosomal
             dwarf allele, since this distinction is not possible phenotypically. Breeding lines consisting of dwarf birds can then be produced by selecting birds homozygous for the dwarf allele, useful in breeding methods involving crossing birds from the breeding line with non-dwarf birds especially to produce broiler birds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Proteins from neurofibromatosis type 2 transcript isoforms - used for diagnosis or inhibition of tumors, and generation of antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; neurofibromatosis type 2; NF2; tumour suppressor; cancer; diagnosis; gene therapy; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.9%; Score 14.2; DB 1; Length 21; 84.2%; Pred. No. 3.3e+02; iive 0; Mismatches 3; Indels
                                                                                                                                          Length 21;
                                                                                                                                                                            3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 21 BP; 1 A; 9 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                               Sequence 21 BP; 4 A; 4 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                          Score 14.2; DB 1;
Pred. No. 3.3e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                    Mouse neurofibromatosis type 2 PCR primer 3m4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Seizinger
                                                                                                                                                                                                            926 CACCACCTCCAGAGATT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BRIM ) BRISTOL-MYERS SQUIBB CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example; Col 14; 45pp; English
                                                                                                                                                                                                                                            19 caccaccracácraaagr 1
                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94US-00179738.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   96US-00628145.
                                                                                                                                             ch
1 Similarity 84.2%;
16; Conservative
                                                                                                                                                                                                                                                                                                                         AAX16142 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kley NA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-166715/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
Les 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-JAN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US5872214-A.
                                                                                                                                                                                                                                                                                                                                                                                         16-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bianchi AB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                           AAX16142;
                                                                                                                                                 Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                             RESULT 115
                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                               AAX16142
                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                            g
   5555555X8
```

891 TIACTICICAGCITCIGCG 909

ð g

Trecrecicacetrices 19

```
·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This sequence is a primer for DNA encoding a light chain complementarity determining region (CDR) from a tumour antigen specific antibody. The invention relates to a method for identifying a binding molecule having selective affinity for a ligand comprising: (a) selectively immobilising a diverse population of binding molecules to a solid support; (b) simultaneously contacting the diverse population immobilised on the solid support whith 2 or more ligands; and (c) determining at least one binding molecule which selectively binds to one or more of the ligands. The method allows for the rapid and efficient methods for the identification of binding molecules which exhibit selective affinity for one or more ligands of interest. They are used particularly for identifying tumourspecific binding polypeptides which can be used as targeting agents for cancer therapy that minimises impact on non-tumour tissues
                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying binding molecules for ligands, particularly tumour antigens -
by selectively immobilising a population of binding molecules to a solid
support and screening for binding to two or more ligands.
                                                                                                    Tumour antigen; antibody; CDR; complementarity determining region; binding molecule identification; tumour-specific binding polypeptide; cancer therapy; light chain; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 14.2; DB 1;
Pred. No. 3.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Primer LR3 used in EIAV DNA isolation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 5; Page 54; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCCAGGAGAGTGACTCTG 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rcccaggagagracacag 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                             98WO-US016280.
                                                                                                                                                                                                                                                                                                         97US-00905825.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.9%;
                                                                                                                                                                                                                                                                                                                                                                      Ή,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                        Μ̈́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 84.2
les 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                        Watkins JD, Huse WD,
                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-153951/13.
                                                                                                                                                                                                                                                                                                                                         SISXI (-XSXI)
                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2001
                                                                                                                                                                                                                   WO9906834-A2
                                                                                                                                                                                                                                                                                                            04-AUG-1997;
                                                                                                                                                                                                                                                                               04-AUG-1998;
                                                                                                                                                                                                                                                11-FEB-1999.
                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAC66309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAC66309;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAC66309/
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

Feng Y, Xue F;

Jia B,

Pan P,

Yu K, Zhao L;

```
This invention relates to a full length provirus genomic DNA sequence AAC66281 of equine infectious anemia virus (EIAV) from the donkey lenkcyte strain. Included in the invention are the gag, pol, env rev, tat, and S2 gene sequences AAC66314 - AAC66319 and their encoded proteins AAB35754 - AAB35759. The invention also relates to PCR primers AAC66282 - AAC66288 which are used to isolate the EIAV DNA sequences. Other primers invention for the isolation and characterisation of the DNA sequences invention for the isolation and characterisation of the DNA sequences preparing gene mutation and deletion vaccines, DNA vaccines and characteristics and in producing an equine infectious anemia virus gene transfer system for gene therapy. The proteins and polymucleotides may also be used in the study of HIV.
   Equine infectious anemia virus; EIAV; donkey leukocyte strain; vaccine; gene therapy; human immunodeficiency virus; HIV; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, variant thrombospondin 1, variant thrombospondin 4, SNP,
polymorphism; vascular disease, coronary artery disease, forensics,
myocardial infarction, atherosclerosis, stroke, venous thromboembolism,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Full-length DNA sequence of provirus genomes, sequences of various functional genes and protein of donkey leukocyte strain of equine infectious anemia virus, used for preparing vaccines and studying HIV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= a
/standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.9%; Score 14.2; DB 1; Length 21; 84.2%; Pred. No. 3.3e+02; live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 6 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                     (NAAL-) NAT CENT AIDS PREVENTION & CONTROL.
(HARB-) HARBIN VETERINARY RES INST CHINESE ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human gene single nucleotide polymorphism #2162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pulmonary embolism; paternity test; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 8; 26pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     897 CTCAGCTTCTGCGATCAGA 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       crcadaricrecegricida 2
                                                                                                                                                                                                                                                                                                        21-APR-2000; 2000WO-CN000096,
                                                                                                                                                                                                                                                                                                                                                                          99CN-00105852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         replace (11, C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chen G,
Lue X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF97401 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-JUN-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-672738/65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shen R,
Fan X,
                                                                                                                                                                   WO200063387-A1.
                                                                                                                                                                                                                                                                                                                                                                      21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                     26-OCT-2000
                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shao Y, S
Xiang W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF97401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 118
AAF97401
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        THE HEAVE ON THE HEAVE OF THE H
```

```
The present invention provides a method of diagnosing a vascular disease in an individual, involving determining the sequence at various polymorphic sites within the human thrombospondin 1 and thrombospondin 4 genes. The sequences at a number of polymorphic sites are also provided in the specification. In particular, the method can be used in the diagnosis of atherosclerosis, myocandial infarction, coronary heart disease, stroke, peripheral vascular diseases, venous thromboembolism pulmonary embolism. Single nucleotide polymorphisms (SNPs) are also useful in forensics, paternity testing, genetic analysis and phenotype correlations to diseases. The present sequence is an example of one of the human gene SNPS shown in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         colon cell proliferative disorder; non methylated CpG dinucleotide; cytostatic; cancer; adenoma; carcinoma; cytosine methylation state; ss;
                                                                                                                                                                                                                             Mccarthy JJ;
                                                                                                                                                                                                                                                                                  Nucleic acids comprising single nucleotide polymorphisms, useful in applications such as forensics, paternity testing, medicine, genetic analysis and phenotype correlations to diseases such as diabetes and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.9%; Score 14.2; DB 1; Length 21;
84.2%; Pred. No. 3.3e+02;
Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                           Daley GQ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primer 128 used to amplify genomic DNA region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21 BP; 5 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                        Gargill M, Ireland JS, Bolk S,
                                                                                                                                                                        (WHED ) WHITEHEAD INST BIOMEDICAL RES. (MILL-) MILLENNIUM PHARM INC.
                                                                                                                                                                                                                                                                                                                                                               Example; Page 196; 242pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    835 TTTCTTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                          07-SEP-2000; 2000WO-US024503.
                                                                                                              99US-0153357P.
                                                                                                                        26-JUL-2000; 2000US-0220947P.
16-AUG-2000; 2000US-0225724P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rcrcgrcrcrgaagacarc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-FEB-2003; 2003WO-EP002035
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-FEB-2002; 2002EP-00004551.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADB54460 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 84.2
nes 16; Conservative
                                                                                                                                                                                                                                                       WPI; 2001-226749/23.
                                                                                                                                                                                                                                                                                                                                     atherosclerosis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       #02003072821-A2
                WO200118250-A2
                                                                                                           10-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified
                                              15-MAR-2001
                                                                                                                                                                                                                        Lander ES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       04-SEP-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADB54460;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADB54460
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

.; 0

ó;

Gaps

· 0

(EPIG-) EPIGENOMICS AG

```
Lesche R;
Becker E,
Nimmrich I,
  Maier S,
  Burger M,
           Schmitt A;
   Adorjan P,
            Rujan T,
```

WPI; 2003-731620/69

Detecting and differentiating between colon cell proliferative disorders associated with a gene or its regulatory regions comprises contacting a target nucleic acid in a biological sample obtained from the subject with reagent

Claim 15; Page 26; 74pp; English.

The invention relates to a novel method for detecting and differentiating between colon cell proliferative disorders associated with at least one gene or its regulatory regions. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at reagents of reagents, where the reagent or series of reagents, where the reagent or series of reagents, where the reagent or series of invention demonstrate cycostatic activity whilst the method may useful for detecting and differentiating between colon cell proliferative disorders, including cancers such as colon adenoma and colon carcinoma. The PNA (peptide nucleic acid) oligomers are useful as probes for determining cycosine methylation state or single nucleotide polymorphisms. The current sequence is that of the PCR primer of the invention which was used to amplify the genomic DNA region.

Sequence 21 BP, 9 A, 9 C, 0 G, 3 T, 0 U, 0 Other;

Gaps . . Score 14.2; DB 1; Length 21; Pred. No. 3.3e+02; 0; Mismatches 3; Indels 915 ATTATCATCACCACCACC 933 2 ACTATAATAACCACCACC 20 4.9%; 84.2%; Query Match
Best Local Similarity 84.23
Matches 16, Conservative g à

ò

ADC82856 standard; DNA; 21 BP 01-JAN-2004 ADC82856; RESULT 120 ADC82856/ NAME OF A STATE OF A S

(first entry)

Sequencing primer #2 for human Fab light chain (CDR region) DNA clone.

Binding molecule; selective affinity; ligand; anti-immunoglobulin reagent; phage expressed antibody library; tumour antigen; complementarity determining region; CDR; human disease; cellular pathology; human; Fab; light chain; sequencing; primer; ss.

Homo sapiens

US2003044772-A1.

06-MAR-2003

15-OCT-2001; 2001US-00977797.

97US-0113667P 98US-00129026 04-AUG-1997; 04-AUG-1998; (MOLE-) APPLIED MOLECULAR EVOLUTION.

Huse WD, Watkins JD,

Η;

WPI; 2003-625402/59.

Identifying binding molecules having selective affinity for ligands for discovering reagents for treating diseases, by contacting solid support

The present invention relates to a method for identifying a binding concleuse having selective affinity for a ligand. The method involves molecule having selective affinity for a ligand. The method involves providing a solid support coated with an anti-immunoglobulin reagent, and a phage expressed antibody library. The invention also discloses a tempor for identifying a natibody having selective affinity for a tumour, and a complementarity determining region (CDR) of an antibody selective for a tumour antigen. The methods of the invention are useful for identifying a binding molecule having selective affinity for a ligand, for the discovery of specific reagents for diagnosis and treatment of human diseases, for identifying binding molecules to, for example tumour cells or other cellular pathologies for the selective cargeting of therapeutic agents such as imaging reagents. The methods are concusted and efficient for the identification of binding concupied and efficient for the identification of binding molecules which exhibit selective affinity for one or more ligands of interest. The exhibit selective affinity for one or more ligands of interest. The exhibit selective affinity for one or more ligands of interest. The exhibit multiple ligands of interest. Moreover, very little information is required regarding the identity or function of either the binding conclusing and every and regarding the identity or function of either the binding molecules or methods are malecule or the ligands of interest. Moreover, very little information of molecule or the ligands of interest. Moreover, very little information of molecule or the ligands we are area of the molecule or the ligands of interest and a molecule or molecules areas and a molecule or the ligands of interest and a molecules can be simultaneously screened against diverse populations of coated with anti-immunoglobulin reagent to a phage expressed antibody ligands to rapidly identify numerous molecules exhibiting a desired binding specificity. The methods provide improved sensitivity and specificity of detection through the selective immobilisation of the binding molecule population on a solid support. The present sequence represents a sequencing primer used in the examples of the present Page 14; 26pp; English. Example 5; invention library  $\mathbb{F}$   $\mathbb{F}$ 

Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;

Gaps ò Length 21; 3; Indels 4.9%; Score 14.2; DB 1; 34.2%; Pred. No. 3.3e+02; 0; Mismatches Local Similarity 84.2%; les 16; Conservative Query Match Matches

·.

712 TCCCAGGAGAGTGACTCTG 730 21 receasoadadrereacas 3 a à

AAH84285 standard; cDNA; 18 AAH84285; AAH84285 

RESULT 121

BP.

(first entry) 21-SEP-2001 Human cell death protective cDNA clone CNI-00721 ORF4, SEQ:299.

cell death protective; apoptosis; necrosis; human; drug screening;

cell death-associated disorder; central nervous system disorder;

cell death-associated disorder; central nervous system disorder;

psychiatric disorder; neurological disorder; ischbemia-related disorder;

cerobral infarction; ischemic encephalopath;

neurodegenerative disorder; Alzheimer's disease; Huntington's disease;

cerobral resease; infection; meningitis; malaria; trypanosomiasis;

cerobral disease; opthalmological disorder; diabetic retinopathy;

macular degeneration; hypertension; myocardial infarction;

atherosclerosis; respiratory disorder; asthma; transgenic animal;

chronic obstructive pulmonary disease; neoplastic condition; cancer;

cerobrative colitis; liver disease; biliary cirrhosis; kidney disorder;

cerobrative colitis; liver disease; biliary cirrhosis; kidney disorder;

cerobrative disease; Hashimoto's thyroiditis; skin condition; dermatitis;

carve's disease; Hashimoto's thyroiditis; skin condition; dermatitis;

cerobraticaria; immune disorder; acquired immunodeficiency syndrome; AlDS; open reading frame; ORF; ss.

sapiens Homo

Portbury SD, Puranam K, Katz LC;

Thomas MB,

Barney S,

99US-00461697.

```
Novel protective sequence polynuclectides and polypeptides, used to identify modulators of their expression and activity, which are used in to treat central nervous system conditions, diseases and disorders.
                                            (COGE-) COGENT NEUROSCIENCE INC
                         11-DEC-2000; 2000WO-US033547
                                                                WPI; 2001-390297/41.
P-PSDB; AAG98752.
    WO200145638-A2
                                  14-DEC-1999;
               28-JUN-2001
                                                       Lo DC,
```

Sequences AAH84132-AAH84370 represent human nucleic acid sequences which protect against cell death (i.e., apoptosis or necrosis). Sequences which protect against cell death (i.e., apoptosis or necrosis). Sequences AAH84132, AAH84145, AAH84150, AAH84120, AAH84120, AAH84120, AAH84120, AAH84120, AAH84120, AAH84120, AAH84120, AAH84120, AAH84135 and AAH84367 represent 10 full-length CDNA clones, while the remaining nucleic acid sequences within the range given above represent the open reading frames (ORFS) of these CDNA clones. Sequences AG498610-AAG98829 represent the polypeptides encoded by the cell death protective or notective or reverse progression through the apoptotic or necrotic prevent, delay or reverse progression through the apoptotic or necrotic pathways when injected into a cell predisposed to or undergoing cell death, and to screen for compounds which modulate their activity or capterssion. Such modulators, preferably a small organic molecule, an antisense molecule, can also be used to treat cell death-related diseases. Such diseases include those associated with cell death-related diseases. Such diseases include those associated with cell death-related diseases. Such diseases include those associated with also includes neurodegenerative disorders used to treat infections with a service as disease. The modulators may also be used to treat infections such as meningitis, malaria, or trypanosomiasis; vascular diseases such as meningitis, malaria, or trypanosomiasis; vascular diseases such as meningitis, malaria, or trypanosomiasis; repitators) myocardial infarction; such as encers or benign tumours; blood cell conditions such as astemme or chronic obstructive pulmonary disease; neoplastic conditions such as astemme or chronic obstructive pulmonary disease; or algence such as astemme or chronic obstructive mended as disease or Habsilmoto's this is skin conditions such as astemme and a disease or Habsilmoto's this is skin or conditions such as astemme and a disease or Habsilmoto's this is skin and or intri conditions such as dermatitis or urticaria; or immune system disorders such as acquired immunodeficiency syndrome (AIDS). The nucleic acids may additionally be used to generate animal models of cell death-associated disorders. The present sequence represents a cell death protective ORF Sequence 18 BP; 4 A; 0 C; 7 G; 7 T; 0 U; 0 Other; Claim 2; Fig 11D; 325pp; English.

.; 0

Gaps

0

0; Indels

4.8%; Score 14; DB 1; Length 20; 100.0%; Pred. No. 3.3e+02;

Query Match
4.0%, ...
Best Local Similarity 100.0%; Pred. No. 3.3

718 GAGAGTGACTCTGG 731

ð 셤

14 GAGAGTGACTCTGG 1

Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

4.8%; Score 14; DB 1; Length 18; 100.0%; Pred. No. 2.9e+02; ative 0; Mismatches 0; Indels 14; Conservative Local Similarity Query Match Best Local S Matches

g

RESULT 122 AAT80030/c

BP. AAT80030 standard; cDNA; 20 AAT80030; SX S

Cysteine noose; antibody variable domain; CDR; cytokine; agonist; complementarity determining region; antagonist; mimetic; antigen; MIP-1 alpha receptor; treatment; HIV infection; CDR3; anti-HIV; ss.

Cysteine noose library SCFV JH Cys back primer.

28-JUL-1999 (first entry)

AAX57212 standard; DNA; 21 BP.

RESULT 123 AAX57212

ò

Gaps

ö

AAX57212;

AAT80030-T80035 represent amplification primers for the alphal integrin

coding sequence. The primers represented in AAT80036-T80041 are used for

the amplification of the alpha2 integrin coding sequence. These sequences

can be used in the method of the invention. The method of the invention

is for the identification of a mammal having, or at risk of developing,

can perman and known to contain cells expressing integrin RNA or protein for

integrin subunit expression. The integrin subunit expression in the

can perman and the compared with a control tissue sample, where altered

integrin subunit expression is correlated with glomerulopathy. The method

can be modified to identify a mammal with diabetes who has, or is at risk

of developing, secondary pathological changes associated with diabetes.

An increase in alpha2, 3,5 or beta-1 integrin expression and/or a decrease

in alpha1 expression is diagnostic of increased risk of nephropathy. The

methods can be used to determine if patients are likely to develop severe

construction and to monitor progress of disease during treatment protocols Detection of nephropathy in mammals - by comparing integrin subunit expression in a tissue sample compared to a control tissue sample. PCR; polymerase chain reaction; primer; amplify; alphai integrin; alpha2 integrin; glomerulopathy; diabetes; nephropathy; ss. Mauer M; Setty S, Example 6; Page 35; 73pp; English. 96WO-US012067. 95US-0001387P. 95US-0001861P. 96US-0016700P. Charonis AS, 29-OCT-1997 (first entry) Alphal integrin primer #1. (MINU ) UNIV MINNESOTA. WPI; 1997-132668/12. WO9704133-A1 Isilibary P, 21-JUL-1995; 02-MAY-1996; 06-FEB-1997. 03-AUG-1995 Synthetic. 

```
Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIY associated NHL; mantle-cell lymphoma; MCJ; immunocytoma; IMC; immunocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA, Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                      This invention describes the construction of libraries of antibody variable domains containing modified complementarity determining regions (CDRs) carrying a cysteine nose and which have cytokine agonist and antagonist mechanisms of action. The method of the invention can be used to obtain peptide ligand minetics capable of binding a target antigen. The binding members may also be used to provide agonists or antagonists of targets such as cytokines. In particular specific binding members for MIP-1 alpha receptors are useful for treatment of HIV infection and for in vitro investigation of mechanisms of HIV infection. A selection of means to select a different and potentially more effective population of peptide ligands than direct display of similar cysteine noses ligands on the surface of bacteriophage. The products of the invention have anti-HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match

4.8%; Score 14; DB 1; Length 21;
Best Local Similarity 77.8%; Pred. No. 3.6e+02;
Matches 14; Conservative 2; Mismatches 2; Indels
                                                                                 Cysteine noose antibody libraries and their production.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 21 BP; 2 A; 6 C; 8 G; 3 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human NOGO Hammerhead Ribozyme #13.
                                                                                                                                      Example 2; Page 30; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         752 CCAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABK00013 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19 CCAGGGTYCCYTGGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MCSWIGGEN J.
                   WPI; 1999-313343/26.
                                            P-PSDB; AAY08351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK00013;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) F
(BLAT/) E
(MCSW/) N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK00013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cysteine noose; antibody variable domain; CDR; cytokine; agonist; complementarity determining region; antagonist; mimetic; antigen; primer; MIP-1 alpha receptor; treatment; HIV infection; CDR3; anti-HIV; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (CDRs) carrying a cysteine noose and which have cytokine agonist and antagonist mechanisms of action. The method of the invention can be used to obtain peptide ligand mimetics capable of binding a target antigen. The binding members may also be used to provide agonists or antagonists of targets such as cytokines. In particular specific binding members for MIP-1 alpha receptors are useful for treatment of HIV infection and for in vitro investigation of mechanisms of HIV infection. A selection of peptide ligand mimetics from CDR3 vysteine noose libraries provide a means to select a different and potentially more effective population of peptide ligands than direct display of similar cysteine noose ligands on the surface of bacteriophage. The products of the invention have anti-HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes the construction of libraries of antibody variable domains containing modified complementarity determining regions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.8%; Score 14; DB 1; Length 21; 77.8%; Pred. No. 3.6e+02; ative 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                      Cysteine noose antibody libraries and their production.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 21 BP; 2 A; 6 C; 8 G; 3 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cysteine noose library SCFV JH region primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (CAMB-) CAMBRIDGE ANTIBODY TECHNOLOGY.
                                                                                                                                                                                                                                           (CAMB-) CAMBRIDGE ANTIBODY TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2; Page 30; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           752 CCAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98WO-GB003255.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97GB-00023062
                                                                                                                                                                                                 97GB-00023062.
                                                                                                                                                  98WO-GB003255.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX57211 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 77.8
nes 14; Conservative
                                                                                                                                                                                                                                                                                                                                          WPI; 1999-313343/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9923222-A1
                                                         WO9923222-A1
                                                                                                                                                  30-OCT-1998;
                                                                                                                                                                                               31-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Osbourn JK;
                                                                                                     14-MAY-1999
                                                                                                                                                                                                                                                                                               Osbourn JK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
            Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX57211;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
```

AAX57211/

ð

0

Gaps ;

```
4X1XXXXXIIIIXXXX
```

(CHOW/) CHOWRIRA B M.

Chowrira BM; Blatt L, Mcswiggen J,

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury. Nucleic acid molecules,

Claim 88; Page 66; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (ND20). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NNA motif) a zinzyme (cleaving RNA with a NNA motif) is used to cleave RNA oc CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CC CD20 in the presence of a divalent cation that is preferably MG²+. Curthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level CC c CD20. The treatment may further comprise the use of one or more treat lymphona, leukeenia, a B-cell lymphona, low-grade or follicular non-Hodgkin's lymphona (NHL), bulky low-grade or follicular non-Hodgkin's lymphona (NHL), bulky low-grade or follicular non-Hodgkin's lymphona (ML), immunocytona (IMC), small B-cell lymphocytic lymphona (Largetting nucleic acid is used to cleave RNA of the NOSO gene in the Immunocytona (IMC), small B-cell lymphocytic lymphona (ML), immunocytona (IMC), small B-cell lymphocytic lymphona (ML), immunocytona (IMC), small B-cell lymphocytic lymphona (MCC). Immunocytona (IMC), small B-cell lymphocytic lymphona (MCC) and divalent cation that is preferably MG²+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the NOGO. The treatment may further comprise the use of one or more content contral nervous system (CNS) injury and cerebrovascular accident (CNA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (MS), demontaria nervous system (CNS) injury and cerebrovascular accident chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (MS), disease, mescular espent contaction of the modulation of sisease, c

Sequence 17 BP; 3 A; 10 C; 0 G; 0 T; 4 U; 0 Other;

Gaps ٥; 4.8%; Score 13.8; DB 1; Length 17; 76.5%; Pred. No. 2.9e+02; 2; Indels 2; Mismatches Best Local Similarity 76.5 Matches 13; Conservative Query Match

·;

ABK00772 standard; RNA; 17 BP. ABK00772 

RESULT 126

ABK00772;

(first entry) 12-MAR-2002

Human NOGO Inozyme #42.

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkii's lymphoma; MHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;

inflammatory arthropathy; central nervous system injury; erebrovascular accident, CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jākob disease; muscular dystrophy; neurodegenerative disease.

sapiens. Synthetic. Homo

WO200159103-A2

16-AUG-2001

09-FEB-2001; 2001WO-US004273.

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P.

RIBOZYME PHARM INC. BLATT L. (BLAT/) (MCSW/) (RIBO-)

MCSWIGGEN J. CHOWRIRA B M. CHOM/)

Chowrira BM; Blatt L, Mcswiggen J,

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88; Page 78; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down contests and a color of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving an RNA molecule opssessing an NCH motif, a G-cleaver (cleaving RNA with a NGN triplet), a zinbozyme or an amberzyme (cleaving RNA with an NGN triplet), a zinbozyme or an amberzyme (cleaving RNA with an NGN triplet), a zinbozyme or contested contested with a cell to reduce CD20 eave RNA contested with a cell to reduce CD20 eave RNA contested with a cell to reduce CD20 eactivity of the cell and treat a patient having a condition associated with the level contested with a cell to reduce CD20 eactivity of the cell and treatment may further comprise the use of one or more charapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-tedgetting nucleic acid is used to cleave RNA contested NHL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, leukaemia, and inflammatory arthropathy. The NOGO-targetting nucleic acid is used to cleave RNA of the NOGO activity of the presence of a divalent cation that is preferably Mg^22+. Furthermore, the contested with a cell to reduce NOGO activity of the contested with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more cell and treat a patient having a condition associated with the level of the NOGO. The treatment may further comprise the use of one or more cell and treat a patient having a condition associated with the level of the contested with a cell to reduce or more cell and treat a patient having a condition accoun (CVA, stroke), Alzheimer's disease, dementia, miltiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, creutzfeld-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is an inozyme of the invention 

Sequence 17 BP; 4 A; 9 C; 0 G; 0 T; 4 U; 0 Other;

Gaps ., 4.8%; Score 13.8; DB 1; Length 17; 76.5%; Pred. No. 2.9e+02; 2; Indels Pred. No. 2.9e 2; Mismatches 76.5%; Conservative Best Local Similarity Matches 13; Conserv Query Match

ö

921 ATCACCACCACCTCCA

```
The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGGO). The regulates expression of a neurite growth inhibitor gene (NGGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) proposessing an NCH motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif) and presence of a divalent cation that is preferably MG^2+.

The CD20 in the presence of a divalent cation that is preferably MG^2+.

The cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therepies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukremia, B-cell lymphoma, low-grade or follicular nontreatment, slymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell
                                                                                                                                                                                                                                                                                             Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurie growth inhibitor gene; NGG0; hammerhead ribozyme; DNAzyme; inozyme; g-cleaver; amberzyme; ginzyme; lymphoma; non-Hodgkin's lymphoma; NHL; lymphom; leukaemia; human immunodeficiency virus; HIV associated NHL; mancle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; central nervous system injury; central nervous system injury; chanced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 88; Page 78; 200pp; English.
|:|| | |||||:|||
1 AUCAUCUCCACCCUCCA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                   ABK00773 standard; RNA; 17
                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blatt L, Mcswiggen J,
                                                                                                                                                                                                                                                                 Human NOGO Inozyme #43.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-607195/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                     12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                          ABK00773;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CHOM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MCSM)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (BLAT/)
                                                                                         RESULT 127
```

```
lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, cimmune thrombocytopaenia, and inflammatory archropathy. The NOGO-crargetting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably MG'2+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the coll and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident CC, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (MS), chemotherapy-induced neuropathy, and/or cher neurodegenerative disease constant dystrophy, and/or chher neurodegenerative disease constant sclerosis (MS), chemother swhich respond to the modulation of NOGO expression. The present constant in inozyme of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A novel method has been developed for identifying an unknown allele of a polyallelic gene. The method involves: (a) contacting the unknown allele with a panel of probes, each of which recognises a sequence motif that is present in some alleles of the polyallelic gene but not in others; (b) observing which probes recognise the unknown allele so as to obtain a fingerprint of the unknown allele; and (c) comparing the fingerprint with fingerprints of known alleles. The present sequence represents a specifically claimed probe for use in the method where the polyallelic
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human leukocyte antigen; HLA; probe; tissue transplantation; MHC gene; major histocompatibility complex; paternity test; forensic medicine; haematological malignancy; inherited disorder; adoptive immunotherapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Identifying unknown allele(s) of a poly:allelic gene using panel of probes each recognising a sequence motif present in some allele(s) useful for donor matching in tissue transplantation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                    4.8%; Score 13.8; DB 1; Length 17; 76.5%; Pred. No. 2.9e+02; tive 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human leukocyte antigen class I gene URSTO probe 350-367.
                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 9 C; 1 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (NOLA-) NOLAN BONE MARROW TRUST ANTHONY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Madrigal A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 5; Page 19; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              922 TCACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 UCAUCUCCACCCUCCAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT94794 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95GB-00024381.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96WO-GB002959.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 76.5
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Arguello R, Avakian H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1997-310717/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          identification; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    W09720197-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUN-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT94794;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT94794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
```

```
gene is a human leukocyte antigen class I gene. The method can be used for genes such as mammalian MHC genes, specifically the HLA class I and I genes, the T cell receptor genes in mammals, TAP, LMP, ras, nonclassical HLA class I genes, human complement factor genes C4 and C2, Bf in the HLA complex, and genes located in mitochondrial DNA, bacterial chromosomes and viral DNA. The method is particularly useful for matching the alleles of the HLA genes in a prospective donor and a prospective recipient in tissue or organ transplantations. The method can also be used in paternity testing, in forensic medicine, as a follow up technique in treatment of haematological malignancies or inherited disorders, in adoptive immunotherapy, and in identification of bacteria and viruses. The method can provide for the identification of alleles of the polyallelic genes using a limited number of selected recurring motif
```

Sequence 18 BP; 5 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Gaps ; 4.8%; Score 13.8; DB 1; Length 18; 88.2%; Pred. No. 3.2e+02; ative 0; Mismatches 2; Indels Conservative Query Match Best Local Similarity 15; Matches

. 0

ð a AAC60611

AAC60611 standard; DNA; 18 BP

AAC60611;

01-FEB-2001 (first entry)

Human PDK-1 antisense oligonucleotide ISIS #29463.

Human; PDK-1; 3-phosphoinositide dependent protein kinase-1; antisense oligonucleotide; phosphorothioate; antiinflammatory; cytostatic; antimicrobial; ss.

Homo sapiens

Synthetic.

JS6124272-A.

26-SEP-2000

99US-00289466. 09-APR-1999;

99US-00289466 09-APR-1999;

(ISIS-) ISIS PHARM INC.

Cowsert LM; Monia BP,

WPI; 2000-611015/58.

Novel antisense compounds useful for inhibiting the expression of human 3 phosphoinositide dependent protein kinase-1, useful e.g. for treating inflammation, tumors and infections. Claim 3; Col 39; 41pp; English.

The present sequence is one of a large number of antisense oligonucleotides which are targeted to a nucleic acid molecule encoding human 3-phosphoinositide dependent protein kinase-1 (PDK-1). The antisense compounds may be oligodeoxynucleotides or chimeric oligonucleotides containing a central gap region, consisting of ten 2'-deoxynucleotides, which is flanked on both sides by 2'-methoxyethyl (2'-MOE) wings. The oligonucleotides have a phosphorothicate backbone. The antisense oligonucleotides have a phosphorothicate backbone. The antisense oligonucleotides are useful for inhibiting the expression of human PDK-1 in human cells or tissues. They are also useful for preventing or delaying infection, inflammation or tumours and are useful 

```
0
                                                                                                                                                                                            Haematopoietic cell proliferation disorder related oligonucleotide #1048.
                                                                                                                                                                                                                                                                                                                                                                                            Pelet C;
                                                           Gaps
                                                                                                                                                                                                            Human, haematopoietic cell proliferation disorder; cytostatic;
gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia;
cytosine methylation state; probe; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                      Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J; Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E; Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Schwope I, Ziebarth H;
                                                          .;
0
                                        Length 18;
                                                        Indels
                  Sequence 18 BP; 3 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
                                     Score 13.8; DB 1;
Pred. No. 3.2e+02;
0; Mismatches 2;
                                                                          945
                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                               26-MAR-2002; 2002WO-EP003401.
for research and diagnostics
                                     4.8%;
                                                                                                                                                                                                                                                                                                                                  26-MAR-2001; 2001US-0278333P.
                                                                                    17 CAACCTCCAGAGAATAT
                                                                        929 CACCCTCCAGAGATTT
                                                                                                                                      ABZ10908 standard; DNA; 18
                                                                                                                                                                           16-JAN-2003 (first entry)
                                             Local Similarity 88.2
nes 15; Conservative
                                                                                                                                                                                                                                                                                                                                                    (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-018942/01
                                                                                                                                                                                                                                                                             WO200277272-A2.
                                                                                                                                                                                                                                                    sapiens.
                                                                                                                                                                                                                                                                                               03-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                   Berlin K,
                                                                                                                                                         ABZ10908;
                                     Query Match
                                                                                                                    RESULT 130
ABZ10908/c
                                                    Matches
SXS
                                                                                                                                             ð
                                                                                        g
```

related sequences and their complements; and as primers for the amplification of haematopoietic cell proliferation disorder related DNA sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between subclasses, diagnosis, prognosis, treatment and/or monitoring of haematopoietic cell proliferative disorders. The present method enables a Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides. dinucleotides within the target nucleic acid. ABZ09861 to ABZ11118
represent specifically claimed nucleotide sequences from the present
invention. Oligonucleotides from the present invention can be used: for
differentiating between healthy haematopoietic cells and proliferative
disorder haematopoietic cells, for differentiating between acute
lymphocytic leukaemia and acute myelogenous leukaemia, as probes for
determining the cytosine methylation state and/or single nucleotide
polymorphisms (SNPS) of haematopoietic cell proliferation disorder The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated Cpg Claim 15; Page 69; 117pp; English.

1 CAGGGTCCCTTGGCCCC 17

q

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method for selective killing of cells in a targetted cell population by selectively activating double stranded (ds) RNA dependent protein kinase (PKR). The method involves selecting ascquence at single genetic locus in targetted cell population that is absent from equivalent locus in non-targetted cell population, obtaining nati-sense RNA having sequence homology with the genetic locus, and permitting anti-sense RNA to hybridise with the RNA transcribed from the genetic locus to form contiguous daRNA for activating PKR. The method is also used for treating proliferative disorders such as neoplastic disease, psoriasis and vasculogenesis or angiogenesis. The present sequence is a PCR primer which is used in targetted cell killing in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Activating double stranded RNA dependent protein kinase in targeted cell population, by hybridizing antisense RNA with sequence at single genetic locus in the population, that is absent in non-targeted population.
                                                                                                                            Gaps
specific classification of haematopoietic cell proliferative
       highly specific classification of haematopoietic cell proliferative
disorders allowing for improved and informed treatment of patients
                                                                                                                                                                                                                                                                                                                                                                                                                             Double stranded RNA dependent protein kinase; PKR; genetic locus; antisense; therapy; proliferative disorder; neoplastic disease; psoriasis; vasculogenesis; angiogenesis; cytostatic; bcl-2; immunoglobulin heavy chain; IgH; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                            PCR primer PA3 used in targetted cell killing in lymphoma cells.
                                                                                                                          0;
                                                                                          Length 18;
                                                                                                                            Indels
                                                  Sequence 18 BP; 1 A; 0 C; 10 G; 7 T; 0 U; 0 Other;
                                                                                       Score 13.8; DB 1;
Pred. No. 3.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (YISS ) YISSUM RES DEV CO HEBREW UNIV JERUSALEM
                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 7; Page 23; 54pp; English.
                                                                                                                                                                 937
                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-JAN-2000; 2000US-0179361P. 22-DEC-2000; 2000US-0258010P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  31-JAN-2001; 2001WO-IL000094
                                                                                                                                                                                                7
                                                                                            4.8%;
                                                                                                             88.2%;
                                                                                                                                                                 921 ATCACCACCACCTCCA
                                                                                                                                                                                                  18 ACCACCACCACCTCAA
                                                                                                                                                                                                                                                                                          AAD12911 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                             Local Similarity 88.2
nes 15, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Levitzky A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-488878/53.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    lymphoma cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200157205-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                16-0CT-2001
                                                                                                                                                                                                                                                                                                                               AAD12911;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shir A,
                                                                                              Query Match
                                                                                                                                 Matches
                                                                                                                                                                                                                                                            131
                                                                                                                                                                                                                                                                         AAD1291
                                                                                                                                                                                                                                                                                                          S S X X X
                                                                                                                                                                     δ
                                                                                                                                                                                                    q
```

```
The sequence represents primer PtrcR, based on the sequence of plasmid plrc99A. The invention relates to a mutant D-amino acid aminotransferase. The mutant protein is useful for production of the D-amino acid preferably glutaryl-7-aminocephalosporanic acid (GL-7ACA) from Cephalosporin C. The D-amino acids are useful in industrial or pharmaceutical products such as sweeteners, antibiotics, peptide enzymes and peptide hormones, and GL-7CA is especially a highly valuable
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  short interfering nucleic acid; siNA; protein kinase C alpha; PKC-alpha; RNA interference; cycostatic; vasotropic; nephrotropic; modulation; inhibition; cancer; breast cancer; ovarian cancer; lung cancer; prostate cancer; glioblastoma; proliferative disease; restenosis;
                                                                                                                                                                                                                                                                                                                                                                                                                              Mutant D-amino acid aminotransferase useful for production of D-amino acid e.g. glutaryl-7-aminocephalosporanic acid from Cephalosporin C, has a substitution at position 13 of wild-type enzyme from bacillus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                             Primer; plrc99A; dat; D-amino acid aminotransferase; sweetener; glutaryl-7-aminocephalosporanic acid; GL-7ACA; antibiotic; peptide enzyme; peptide hormone; cephem; plrcR; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   pharmaceutical chemical for the synthesis of cephem antibiotics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·:
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PKC-alpha short interfering nucleic acid SEQ ID NO:146.
                                                                                                                                                                                                                                                                                                                                                                          Ξ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.8%; Score 13.8; DB 1; Length 19; 88.2%; Pred. No. 3.4e+02;
                                                                                                                                                                                                                                                                                                                                                                           Chang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2; Indels
                                                                                                                                                                                                                                                                                                                                                                           Ή,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 2 A; 4 C; 4 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                           Tsai
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                             Lin L,
                                                                                                                                                                                                                                                                                                                                                                             Chen H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Col 4; 15pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             917
                                                                                                                                                                                                                                                                                                                                               (BIOT-) DEV CENT BIOTECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17
           BP.
                                                                                                                                                                                                                                                                                     99US-00466257.
                                                                                                                                                                                                                                                                                                                    99US-00466257.
                                                                                                    Plasmid pTrc99A primer pTrcR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901 GCTTCTGCGATCAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 gerrergegreergarr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADA25415 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
           ABA96160 standard; DNA; 19
                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 88.2
                                                                                                                                                                                                                                                                                                                                                                           Hwang T, Wu S, Chou H,
                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-163236/21.
                                                                                                                                                                                                                            US6337190-B1.
                                                                                                                                                                                                                                                                                       17-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-NOV-2003
                                                                                                                                                                                              Unidentified
                                                                                                                                                                                                                                                                                                                    17-DEC-1999;
                                                                     20-MAY-2002
                                                                                                                                                                                                                                                         08-JAN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADA25415;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                          ABA96160;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADA25415
ABA96160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ωp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
```

.; 0

. 0

Gaps

0 ;

4.8%; Score 13.8; DB 1; Length 19; 88.2%; Pred. No. 3.4e+02; rative 0; Mismatches 2; Indels

753 CAGGGTCCCTAGGCCTC 769

ŏ

Local Similarity 88.2 les 15; Conservative

Query Match

Best Loc Matches

Sequence 19 BP; 2 A; 8 C; 6 G; 3 T; 0 U; 0 Other;

```
The present invention describes a short interfering nucleic acid (siNA)
that downregulates expression of a protein kinase C-alpha (PKC-alpha)
gene by RNA interference. Also described: (1) a siNA that modulates
cypression and/or activity of genes for other isoforms of PKC or genes
involved in the PKC pathway; (2) kits for in vitro or in vivo delivery of
siNA; (3) conjugates and/or complexes of siNA; and (4) vectors that
express siNA. The siNA sequences have exptstatic, vasotropic and
nephrotropic activities, and can be used in the modulation (inhibition)
certain activities, and can be used in the modulation (inhibition)
of expression of the PKC-alpha genes They are potentially
used to modulate expression of PKC-alpha genes. They are potentially
useful in treating a variety of cancers including e.g. breast cancer,
used to modulate expression of FKC-alpha genes. They are profiterative diseases
cancers of the head and neck, ovarian cancer, lung cancer, prostate
cancer, and glioblastoma and for treating other proliferative diseases
and conditions, such as restenosis and polycystic kidney disease. The
siNA may also be useful for diagnosis, drug screening, target
cidentification and validation, genetic engineering, studying gene
function, and for gene mapping (e.g. of single-nucleotide polymorphisms).
The present sequence represents a human PKC-alpha siNA, which is used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer and restenosis, downregulates expression of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human PKC-alpha short interfering nucleic acid target SEQ ID NO:21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.8%; Score 13.8; DB 1; Length 19;
88.2%; Pred. No. 3.4e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19 BP; 5 A; 2 C; 9 G; 0 T; 3 U; 0 Other;
polycystic kidney disease; human; ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 3; Page 118; 143pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SIRN-) SIRNA THERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2002US-0406784P.
2002US-0408378P.
2002US-0409293P.
2002US-0411707P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           897 CTCAGCTTCTGCGATCA 913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADA25290 standard; RNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                         2002US-0358580P.
2002US-0363124P.
2002US-0386782P.
                                                                                                                                                                                                                                                                                                         11-FEB-2003; 2003WO-US004034.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2003US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cccaccirciccarca 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein kinase C-alpha gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J, Beigelman L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 88.2 es 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-679891/64.
                                                                                                                                                                    WO2003070983-A1
                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LS-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                             20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                 11-MAR-2002;
                                                                                                                                                                                                                                        28-AUG-2003
                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADA25290;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADA25290
NAMES ON STATE OF STA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEXEXEX
```

```
The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of a protein kinase C-alpha (PKC-alpha) gene by RNA interference. Also described: (1) a siNA that modulates expression and/or activity of genes for other isoforms of PKC or genes involved in the PKC pathway; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; and (4) vectors that express siNA. The siNA sequences have cytostatic, vasotropic and nephrotropic activities, and can be used in the modulation (inhibition) of expression of FKC-alpha gene by RNA interference. The siNA can be useful in treating a variety of cancers including e.g. breast cancer, useful in treating a variety of cancers including e.g. breast cancer, cancers of the head and neck, ovarian cancer, lung cancer, prostate cancer, and glioblastoma and for treating other proliferative diseases and conditions, such as restenosis and polycystic kidney disease. The cancer be useful for diagnosis, drug screening, target cancer indentification and validation, genetic engineering, studying gene function, and for gene mapping (e.g. of single-nucleotide polymorphisms).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ô
short interfering nucleic acid; siNA; protein kinase C alpha; PKC-alpha; RNA interference; cytostatic; vasotropic; nephrotropic; modulation; inhibition; cancer; breast cancer; ovarian cancer; lung cancer; prostate cancer; glioblastoma, proliferative disease; restenosis; polycystic kidney disease; human; ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer and restenosis, downregulates expression of the protein kinase C-alpha gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 3 A; 9 C; 2 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 13.8; DB 1;
Pred. No. 3.4e+02;
4; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 3; Page 118; 143pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (SIRN-) SIRNA THERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                   2002US-0363124P.
2002US-0386782P.
                                                                                                                                                                                                                                                                                                                                      29-AUG-2002; 2002US-0406784P.
05-SEP-2002; 2002US-0408378P.
09-SEP-2002; 2002US-0409378P.
18-SEP-2002; 2002US-0411707P.
                                                                                                                                                                                                                                            11-FEB-2003; 2003WO-US004034
                                                                                                                                                                                                                                                                                                                                                                                                                  2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        897 CTCAGCTTCTGCGATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCACCUUCUGCGAUCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen J, Beigelman L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ82537 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 64.79
"Arches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-679891/64.
                                                                                                                                                                      WO2003070983-A1
                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                   11-MAR-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                  15-JAN-2003;
                                                                                                                                                                                                                                                                                 20-FEB-2002;
                                                                                                                                                                                                         28-AUG-2003
                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ82537;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ82537
   g
```

```
Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA66991;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA66991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                    Sequences were determined from the ends of chromosome 11-specific cosmids by automated sequencing without intermediate subcloning. A sample of 371 DNA sequence fragments were determined and of these, 277 were suitable for STS primer prediction by computer analysis (using the "Primer" program available from E.Lander, MIT). The STSs and cosmids were mapped by in situ hybridiation, somatic cell hybrid analysis or both. Using this method, 370 STSs specific for human chromosome 11 were generated and most of them were regionally mapped. This procedure illustrates a novel method for sequencing complex genomes, designated "sequence sampled mapping". The sequence sampled mapping method is useful for the completion of high density sequence-based maps, and ultimately, for the complete sequencing of genomic DNA directly from cosmid clones. See MAQ82001-Q82706 for STS primers. (Also see AAQ91325-58). (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ss; human; B7; T cell; inflammation; autoimmune disease; cell activation; cell proliferation.
                                                                                                                                                                                                                                                                                    Sequencing complex genomes, present as fragments in a cosmid library - l sequencing end-specific nucleotides of each clone then correlating with spatial relationship of cosmid, esp. for mammalian chromosomes.
                                                        sequence sampled mapping; genomic analysis; complex genome mapping; cosmid library; chromosome 11; sequence tagged site; STS analysis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.8%; Score 13.8; DB 1; Length 20; 88.2%; Pred. No. 3.6e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 1 A; 8 C; 4 G; 7 T; 0 U; 0 Other;
                                  Chromosome 11 (locus CCND1) STS primer PRAD1-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human B7-1 targetted oligonucleotide 13797.
                                                                                                                                                                                                                    (SALK ) SALK INST BIOLOGICAL STUDIES.
                                                                                                                                                                                                                                                                                                                                    Example 4; Page 86; 128pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 823 GGCTGTGTCTCTTTCT 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 decrerererer 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                             94WO-US006810.
                                                                                                                                                                                   93US-00078471
                                                                                                                                                                                             93US-00117952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20
              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 88.2
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV47983 standard; DNA;
  25-MAR-2003 (revised)
13-SEP-1995 (first en
                                                                                                                                                                                                                                           Smith MW;
                                                                                                                                                                                                                                                               WPI; 1995-036508/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                   15-JUN-1993;
07-SEP-1993;
                                                                                                                 WO9429486-A1
                                                                                                                                                             15-JUN-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                          Synthetic
                                                                                                                                                                                                                                           Evans GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV47983;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV47983
  ð
```

```
The oligonucleotides which specifically hybridise to B7 modulate its expression (and thus T cell activation and proliferation). This is particularly useful for treatment and prevention of inflammation and autoimmune diseases, e.g. asthma, (juvenile) diabetes, myasthenia gravis, Grave's disease, rheumatoid arthritis, allograft rejection, psoriasis, (systemic) lupus erythematosus, multiple sclerosis, contact dermatitis, rhinitis, allergy, cancer and metastases. The oligonucleotides may also be used to manipulate T cell activation ex vivo; to determine or detect B7 protein expression; for diagnosis; as assay and purification reagents, and to study physiological roles of B7 proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human leukocyte antigen; HLA; class I allele type; probe; PCR primer;
amplification; hybridisation; organ transplant; gene typing; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New oligo:nucleotide(s) that modulate expression of B7 proteins - used for, e.g. controlling activation and proliferation of T cells, particularly for treatment, diagnosis and prevention of inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human leukocyte antigen B allele DNA probe BL38 SEQ ID NO:49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 13.8; DB 1; Length 2 Pred. No. 3.6e+02; 0; Mismatches 2; Indels
                                                                  /*tag= a
/note= "Phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seguence 20 BP; S A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 33; 120pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA66991 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-JP005527.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98JP-00335151
                                                                                                                                                                                                                                                                     97WO-US023270
                                                                                                                                                                                                                                                                                                                                 96US-00777266.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           762 TAGGCCTCCACTTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 TAAGACTCCACTTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SHIO ) SHIONOGI & CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bennett CF, Vickers TA;
                            1. .20
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-387783/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200031295-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-NOV-1998;
                                                                                                                                                                                                                                                                     16-DEC-1997;
                                                                                                                                                    WO9829124-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-JUN-2000.
                                                                                                                                                                                                             09-JUL-1998
```

ô

Kaneshige T;

Moribe T,

·.

```
leukocyte antigen (HLA) class I antigen or allele by a combination of polymerase chain reaction (PCR) using a primer pair whereby all HLA-A, -B or -C alleles can be amplified or using reverse hybridisation analysis or—comprising a DNA probe covalently bonded to microtitre plate wells which specific HLA-A, -B or—c allele. The method is applicable in gene typing, judging donor-recipient compatibility during organ transplant and correlation analysis for diagnosis of various diseases. The method is applicable in gene typing, simple, rapid and accurate, with possibility of mechanisation and automation, without the problems encountered by using the prior-art techniques. AAA66941 to AAA67072 represent invention
                                                                                  type with possibility of mechanization and automation, applicable in judging donor-recipient compatibility during organ transplant and disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel compound for diagnosing, preventing and treating immune disorders, comprising an oligonucleotide that specifically hybridizes with a nucleic acid sequence encoding B7 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention provides sequences of antisense oligonucleotides targeted at the murine and human B7-1 and B7-2 coding and mRNA sequences.
                                                                    Simple, rapid and accurate method for distinguishing HLA class I allele
                                                                                                                                                                                      The present invention describes a method for distinguishing a human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation; autoimmune disorder; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human B7-1 mRNA antisense oligonucleotide SEQ ID NO: 22.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 6 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 45; 162pp; English.
                                                                                                                                                     Claim 8; Page 60; 83pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACCCTCCAGAGGATGT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAY-2000; 2000WO-US014471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           929 CACCCTCCAGAGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF32825 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Vickers TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ISIS-) ISIS PHARM INC.
                                  WPI; 2000-400097/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-049991/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200074687-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bennett CF,
                                                                                                                       diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 138
à
```

ВЪ

```
ö
The antisense sequences have phosphorothhoate backbones and be used in uncleotides are 2'-methoxyethoxy residues. The sequences can be used in the treatment of inflammatory and autoimmune disorders, including asthma, juvenile diabetes mellitus, myasthenia gravis, Graves' disease, rheumatoid arthritis, allograft rejection, inflammatory bowel disease, multiple sclerosis, psoriasis, systemic lupus erythematosus, contact dermatitis, rhinitis, allergies and cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention provides a microarray of oligonucleotides comprising probes for the human HLA Class I genes attached to a solid support. These can be used in HLA typing. Oligonucleotide arrays are also useful in large scale gene discovery, monitoring gene expression, polymorphism detection and gene mapping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide arrays useful for human leukocyte antigen (HLA) tissue typing, comprises HLA class I oligonucleotide probes representing all known polymorphisms in HLA class I locus, on a solid support.
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, HLA typing, oligonucleotide array; Class I; gene discovery; expression; polymorphism detection; mapping; probe; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                          4.8%; Score 13.8; DB 1; Length 20;
88.2%; Pred. No. 3.6e+02;
ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.8%; Score 13.8; DB 1; Length 20; 88.2%; Pred. No. 3.6e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human HLA Class I oligonucleotide probe SEQ ID NO: 11.
                                                                                                                                                                                                                                                           Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (HUTC-) HUTCHINSON CANCER RES CENT FRED.
(UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hansen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure, Page 47; 83pp, English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     762 TAGGCCTCCACTTCTGA 778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-JUN-2000; 2000WO-US016722
                                                                                                                                                                                                                                                                                                                                                        88.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0139843P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 TAAGACTCCACTTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF54566 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        929 CACCCTCCAGAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4 CACCCTCCAGAGGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                        Local Similarity 88.2
les 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Guo Z,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-102734/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Petersdorf EW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200079006-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-DEC-2000,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF54566;
                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                        Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF54566
      888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME OF THE PROPERTY OF THE PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
```

.; 0

Indels

4.8%; Score 13.8; DB 1; Length 20; 88.2%; Pred. No. 3.6e+02; active 0; Mismatches 2; Indels

945

RESULT 140

Karras JG;

99US-00326186

AAF54556;

AAF54556

```
AB221947 to AB221958 represents death inhibiting factor tumour related gene (AP14, also known as fade-inhibition factor) antisense oligonucleotides. The present invention also describe a human liver cancer (HepG2) cell strain and Balb/c (nu/nu) nude mouse inoculative liver cancer cells which can be used as models for screening and evaluation of the 12 antisense oligonucleotides. In vitro studies show that the antisense oligonucleotides can effectively inhibit the growth of human liver cancer cells, and have a dose-dependent relationship. In the nothing mouse model the antisense oligonucleotide also inhibits growth of tumours. Therefore, the antisense oligonucleotide also inhibits growth of tumours flatense tumours and its tumour related diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antisense oligonucleotide which specifically hybridizes with a region of a nucleic acid encoding human Damage-specific DNA binding protein p48, useful for treating diseases and conditions associated with p48
                                                                                                                                                                                                                                                                                                         Antisense oligonucleotide structure and use using fade-inhibition factor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ss; antisense oligonucleotide; antisense therapy; PCR; primer; damage specific DNA binding protein 2; DDB2; p48; chromosome 11; DDB; E2F transcription factor; p48 expression-related disease; DDB2 expression-related disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.8%; Score 13.8; DB 1; Length 20; 88.2%; Pred. No. 3.6e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                         (RADI-) RADIOMEDICINE ACAD MILITARY MEDICAL SCI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human DDB2 antisense oligonucleotide 27.
                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 1 (Claims); 9pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-DEC-2000; 2000US-00732199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-DEC-2000; 2000US-00732199
11-DEC-2000; 2000CN-00134535
                                                                   11-DEC-2000; 2000CN-00134535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               88.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4 GAAGCACCTCTGGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781 GCAGCCCCTCTGGTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAL43528 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                         Guan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-424788/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wyatt J;
                                                                                                                                                                                                                                                   WPI; 2002-733578/80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                         Lin L,
                                                                                                                                                                                                                                                                                                                                                  API4 as target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US6379960-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-APR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Popoff I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAL43528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                         Wang S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAL43528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PART SERVE S
         P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention provides a microarray of oligonuclectides comprising probes for the human HLA Class I genes attached to a solid support. These can be used in HLA typing. Oligonuclectide arrays are also useful in large scale gene discovery, monitoring gene expression,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; death inhibiting tumour related gene; API4; liver; HepG2; antisense oligonucleotide; fade-inhibition factor; liver cancer; tumour; tumour related disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide arrays useful for human leukocyte antigen (HLA) tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               typing, comprises HLA class I oligonuclectide probes representing all known polymorphisms in HLA class I locus, on a solid support.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                      Human, HLA typing, oligonucleotide array; Class I; gene discovery; expression; polymorphism detection; mapping; probe; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 13.8; DB 1; Length 20;
Pred. No. 3.6e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                            Human HLA Class I oligonucleotide probe SEQ ID NO: 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 8 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ŗ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human API4 antisense oligonucleotide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polymorphism detection and gene mapping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CENT FRED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure, Page 44; 83pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hansen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (HUTC-) HUTCHINSON CANCER RES (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABZ21947 standard; DNA; 20 BP
                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-JUN-2000; 2000WO-US016722.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0139843P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 88.2%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 CACCCTCCAGAGCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     929 CACCCTCCAGAGAATTT
                                            AAF54556 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ,
Z
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gno
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-102734/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200079006-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Petersdorf EW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CN1358857-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-MAR-2003
                                                                                                                                                                      03-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
```

ABZ21947;

Ношо

RESULT 141

g

à

ó

Gaps

.,

```
The invention comprises antisense oligonucleotides targeted to the human damage specific DNA binding protein 2 (DDB2 - also known as p48) gene, located on chromsome 11. DDB2 is a subunit of the the DDB protein which is believed to be a negative regulator of the BZF transcription factor. The antisense oligonucleotides of the invention are used to treat a person suspected of having or being prone to a disease or condition associated with DDB2/p48 expression. The present DNA sequence represents a human DDB2/p48 antisense oligonucleotide of the invention. NOTE: The present DNA sequence is a 2'-0-methoxyethyl gapmer and contains a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense compound; caspase 9; C9; hyperproliferative disorder; stroke; hemactopoidetic disorder; cholesterol disorder; bone metabolism disorder; brain injury; neurodegenerative disease; infection; inflammation; tumour; phosphorothioate backbone linkage; 2'-methoxyethyl; 2'-MOE; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chimeric phosphorothioate oligonucleotide #90 for caspase 9 inhibition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mod_base= OTHER
/note= "Phosphorothioate nucleotides, all cytidine
residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE) nucleotides"
                                                                                                                                                                                                                                                           4.8%; Score 13.8; DB 1; Length 20; 88.2%; Pred. No. 3.6e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                              Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                              Claim 3; Col 45-46; 36pp; English.
                                                                                                                                                                                                                                                                                                                          853 CGICCIGGCICCAGIIG 869
                                                                                                                                                                                                                                                                                                                                                     cerceréderecadare 18
                                                                                                                                                                                                                                                                                                                                                                                                                                ABK69338 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-SEP-2001; 2001WO-US028233.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-SEP-2000; 2000US-00659845
                                                                                                                                                                                                                                                                             88.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                   phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       *tag= a
                                                                                                                                                                                                                                                                         Best_Local Similarity 88.2
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-351874/38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Watt AT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200222641-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-MAR-2002
 expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABK69338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chimeric.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zhang H,
                                                                                                                                                                                                                                                                                                                                                                                                RESULT 143
ABK69338
₽
```

·. nucleic acid molecule encoding caspase 9 (C9). The compound specifically hybridises with and inhibits the expression of caspase 9. The invention also describes an antisense compound that specifically hybridises with an also describes an antisense compound that specifically hybridises with an subjective street of the nucleic acid. The invention is useful for inhibiting the expression of C9 in cells or tissues and is also useful for treating an animal having a disease or condition associated with C9, including an hyperproliferative, haematopoietic or cholesterol disorder, home metabolism disorder, stroke, brain injury or neurodegenerative disease. The compound is commonly useful as a research and diagnostics reagent. It is also useful to distinguish between functions of various members of a biological pathway. The invention also be useful prophylactically e.g. to prevent or delay infection, inflammation or tumour formation. The antisense compound of the invention is often preferred over native form because of enhanced cellular uptake, enhanced affinity for nucleic acid target and increased stability in presence of nucleases. The present nucleic acid sequence represents one of a collection (ABKS9249-ABK69396) of chimeric phosphorothicate oligonuclectides having 2'-methoxyethyl (2'-MOB) wings. This sequence was Human; antisense; lung dysfunction, nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds. The present invention relates to a new antisense compound targeted to a New antisense oligonucleotide which modulates expression of caspase 9, useful to treat tumor, inflammation or to prevent infection in humans. Gaps used in the methods of the invention for inhibition of caspase 9 . 0 / Match 4.8%; Score 13.8; DB 1; Length 20; Local Similarity 88.2%; Pred. No. 3.6e+02; nes 15; Conservative 0; Mismatches 2; Indels Pabalan J, Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other; Human CCR3 oligonucleotide sequence. Claim 26; Page 94; 145pp; English. Li Y, Sandrasagra A, Tang L, Shahabuddin 752 CCAGGGTCCCTAGGCCT 768 20 ABZ97786 standard; DNA; 20 BP. 23-APR-2002; 2002WO-US013135. 24-APR-2001; 2001US-0286137P. (EPIG-) EPIGENESIS PHARM INC. CCAGGGTGCCTTGGCCT (first entry) WO200285308-A2 17-0CT-2003 Homo sapiens 31-OCT-2002. Nyce JW, I Miller S, ABZ97786; Query Match RESULT 144 Matches ABZ97786 ð 셤 

0;

Gaps

0:

Pharmaceutical composition for treating ailments associated with impaired

WPI; 2003-229219/22.

ů,

Aguilar

Katz E, S;

Claim 3; Page 93; 113pp; English.

respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

Disclosure; SEQ ID NO 13028; 872pp; English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, 5' or 2' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a cuse in antisense gene therapy. The composition is useful for treating or preventing a respiratory lung or therapeutic respiratory effect of an autisinflammatory steroid in a subject, for reducing or depleting levels of or reducing bencholdiation, increasing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung suffacemation, lung allergies, or a respiratory disease or condition. lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published pct sequences

Seguence 20 BP; 7 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

Gaps ., Score 13.8; DB 1; Length 20; Pred. No. 3.6e+02; 2; Indels Mismatches ; 4.8%; 88.2%; Query Match
Best Local Similarity 88.2:
....hes 15; Conservative

ö

4 GAGGATCATCACCACCA

ð g RESULT 145 ABZ77262

ABZ77262 standard; DNA; 20

BP.

ABZ77262;

28-MAY-2003

(first entry)

Antisense oligonucleotide for C-reactive protein 3'-UTR.

Antisense oligonucleotide; C-reactive protein; phosphorothioate; cardiovascular disease; unstable angina; myocardial infarction; ss. 

Synthetic

Homo sapiens.

WO2003010284-A2

06-FEB-2003

15-JUL-2002; 2002WO-US022656.

25-JUL-2001; 2001US-00912724.

(ISIS-) ISIS PHARM INC.

WPI; 2003-239435/23.

Graham MJ;

Crooke RM,

New antisense oligonucleotides, useful for modulating the expression of C-reactive protein or for treating a disease or condition associated with the expression of C-reactive protein, e.g. unstable angina or myocardial infarction

```
The present invention describes a rat highly sensitive to carcinogen with its normal function of gap junction inhibited. Also described: (1) constructing the transgenic rate by obtaining a plasmid vector through integration of a mutated rat connexin cDNA to the downstream of a promoter, followed by microinjection of such plasmid vector into a fertilised egg and transplantation to the oviduct; (2) detecting carcinogens by administering a test substance into the rat that is highly sensitive to carcinogen to induce cancer onset.

The rats are applicable in detecting carcinogen to induce cancer onset.

The rats are applicable in detecting carcinogens and screening anticancer drugs. With this method, carcinogens can be detected quickly and highly sensitively. These animals can be used for efficient screening of cancinoment and incomes and screening of cancinoment and any anticancer drugs. The present sequence represents a mutagenic PCR primer for rat gap junction membrane channel protein beta 1 (Gjbl), which is used in an example from the present invention. Rat Gjbl; which is
                                                                                                                                                                                                                                                                           ·
0
                                                   targeting to DNA encoding C-reactive protein. The antisense compounds are useful for modulating the expression of C-reactive protein, and for treating a disease or condition associated with expression of C-reactive protein, e.g. cardiovascular disease, such as unstable angina or myocardial infarction. ABZ77222-75 represent antisense oligonucleotides of the invention, directed against human C-reactive protein gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rat; carcinogen; transgenic rat; connexin; cancer; cytostatic; Gjbl; anticancer; gap junction membrane channel protein beta 1; chromosome X; mutagenesis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Highly carcinogen-sensitive transgenic rats with partial deletion of connexin gene to inhibit normal function of gap junction, applicable in
                                                                                                                                                                                                                                                                           Gaps
                                       specification describes antisense oligonucleotides which are
                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               detecting carcinogens and screening anticancer drugs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rat Gjb1 related mutagenic PCR primer P2 SEQ ID NO:5.
                                                                                                                                                                                               Sequence 20 BP; 2 A; 9 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                    Score 13.8; DB 1;
Pred. No. 3.6e+02;
                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NISC-) JAPAN SCI & TECHNOLOGY CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hokaiwado N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; Page 7; 31pp; Japanese.
                                                                                                                                                                                                                                                                                                                  903
                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-AUG-2001; 2001JP-00253241.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-AUG-2002; 2002WO-JP008373
                                                                                                                                                                                                                                        4.8%;
                                                                                                                                                                                                                                                        88.2%;
                                                                                                                                                                                                                                                                                                                  887 GCACTTACTTCTCAGCT
                                                                                                                                                                                                                                                                                                                                                         GCGCTTCCTTCTCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC49468 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                               15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shirai T, Asamoto M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-290002/28.
                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rattus norvegicus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003017756-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACC49468;
                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 146
                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                   ઠે
                                                                                                                                                                                                                                                                                                                                                     g
```

rng.res

```
762 TAGGCCTCCACTTCTGA 778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                         31-DEC-1996; 96US-00777266.
04-JUN-1999; 99US-00326186.
25-MAY-2000; 2000WO-US014471.
                                                                                                                                                                                                    09-MAY-2001; 2001US-00851871.
                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                raagacrecaerrerga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ51187 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                  encoding human B7 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                  Vickers TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15; Conservative
                                                                                                                                                                                                                                                                   (BENN/) BENNETT C F. (VICK/) VICKERS T A.
                                                                                                                                                                                                                                                                                                                                       WPI; 2003-863863/80.
                                                                                                                                                                                                                                                                                 (VICK/) VICKERS T A (KARR/) KARRAS J G.
                                                                                                                                                           US2003176374-A1
                                                                                                                                      Homo sapiens.
                         29-JAN-2004
                                                                                                                                                                                                                                                                                                                  Sennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-APR-1994
                                                                                                                                                                                 18-SEP-2003.
                                                                                                                         Synthetic.
    ADE27760;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ51187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 149
AAQ51187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a method and a kit for determining the expression of mRNA or CDNA of a protein participating in the maintenance of skin structure. The method is quantitative, simple and accurate in the determination of extracellular matrix components of laminin 5 chain genes IMAMA3, LAMB3 and LAMC2, matrix metalloproteinases MMP-1, MMP-2, MMP-3 and MMP-9, VII collagen, type I collagen alpha 1 chain, type IV collagen alpha 2 chain, type IV collagen alpha 2 chain, TIMP-1, TIMP-2 and TIMP-3. ACEF72201 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ö
                                                                                                                                                                                                                                                    Human; mouse; skin structure; skin; laminin 5 chain gene; LAWA3; LAMB2;
LAMC2; extracellular matrix component; matrix metalloproteinase; MMP-1;
MMP-2; MMP-3; MMP-9; TIMP-1; TIMP-2; TIMP-3; collagen; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A method and a kit for determination of expression of mRNA or cDNA of a protein participating in the maintenance of skin structure.
                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                   °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.8%; Score 13.8; DB 1; Length 20; ilarity 88.2%; Pred. No. 3.6e+02; Conservative 0; Mismatches 2; Indels
                                          4.8%; Score 13.8; DB 1; Length 20; 88.2%; Pred. No. 3.6e+02; ive 0; Mismatches 2; Indels
                    Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 4 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                 Human TIMP-2 forward PCR primer SEQ ID NO:82.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 4; 34pp; Japanese.
                                                                                     918 ATCATCACCACCCT 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781 GCAGCCCTCTGGTGCC 797
                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADE27760 standard; DNA; 20 BP
                                                                                                          17 ATCATCACCATCACCAT 1
                                                                                                                                                                                                                                                                                                                                                                             15-JAN-2002; 2002JP-00006797.
                                                                                                                                                                                                                                                                                                                                                                                                  15-JAN-2001; 2001JP-00006952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ო
                                                                                                                                                               ACF57282 standard; DNA; 20
                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGCCCATCTGGTACC
                               Query Match
Best Local Similarity 88.2-
15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                        (SHIS ) SHISEIDO CO LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-407328/39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
Les 15; Conserv
                                                                                                                                                                                                                                                                                                                                   JP2002330792-A.
                                                                                                                                                                                                                                                                                                  Homo sapiens
chromosome X
                                                                                                                                                                                                             16-0CT-2003
                                                                                                                                                                                                                                                                                                                                                       19-NOV-2002
                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             nvention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S:
Matches 15,
                                                                                                                                                                                      ACF57282;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                            RESULT 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 148
                                                                                                                                                       ACF57282,
 SX CC
                                                                                                                                                                g
                                                                                     à
```

```
Human B7-1 mRNA targeted oligonucleotide SEQ ID 22.

XX si human; B7-1 mRNA targeted oligonucleotide SEQ ID 22.

XX si human; B7-1; millammatory skih disorder; antisense; psoriasis; contact dematitis; atopic dermatitis; seborthal dematitis; czema;

XX sythesic.

Syrthesic.

XX Syrthesic.

X
```

```
8×300000000000×8
                                                                                                                                                                                                                                            엄
                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                      ·
0
                                                                                                                                                                                                       The DNA encodes a fragment of a novel calcitonin precursor. The calcitonin precursor may be prepared by ligating a number of synthetic oligonuclectides, each comprising part of the DNA sequence encoding the calcitonin precursor, and transforming a microbial cell with a plasmid containing this DNA construct. The recombinant calcitonin precursor protein may then be collected from the culture media. The calcitonin precursor has both promoting activity on bone formation and inhibits bone absorption. See also AAQ51158-86
                                                                                                                                             in precursor comprising peptide with (repeat units of) specified - promote bone formation and inhibit bone resorption.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New nucleic acid segments containing polymorphic sites, or complements and methods of detecting a nucleic acid - for general use including diagnosis and monitoring of diseases.
                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             polymorphic site; nucleic acid analysis; diagnosis; monitoring; er; inflammation; heart disease; CNS disease.
                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleotide fragment containing polymorphic site, WI-10400 (i).
                                                                                                                                                                                                                                                                                                                                            4.8%; Score 13.8; DB 1; Length 21;
88.2%; Pred. No. 3.8e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                      Sequence 21 BP; 7 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Berno A;
                                                                                                                                                                                    Disclosure; Page 10; 11pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                              877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fan J,
                                                                                                                                                                                                                                                                                                                                                                                                                      18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-00813159
97US-0042125P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98WO-US004571
                                                 91JP-00085392.
                                                                        91JP-00085392.
                                                                                                 (WAKT ) WAKUNAGA SEIYAKU KK.
                                                                                                                                                                                                                                                                                                                                                                                              861 CTCCAGTTGGAACACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV67320 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                     CTCAAGTTGGAACACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                        15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chee M,
                                                                                                                                                 Calcitonin precursor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1998-495419/42.
                                                                                                                         WPI; 1993-348479/44
                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lipshutz RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9838846-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-MAR-1997;
 JP05255391-A
                                                                        17-APR-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-DEC-1998
                                                 17-APR-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-SEP-1998
                         05-0CT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV67320;
                                                                                                                                                               sednence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 150
                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                à
```

Claim 1; Page 7; 42pp; English

```
·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       contain single nuclectide polymorphisms (SNPS). A method is included in the invention for analysing a nucleic acid sample, which consists of determining the base occupying any one of the polymorphic sites given in the SNP containing dequences. The nuclectide sequences can be used in the diagnosis or monitoring of diseases, such as cancer, inflammation, heart diseases, diseases of the cardiovascular system, and infection by microorganisms. The oligonucleotides are also useful in the manufacture of a medicament for the treatment or prophylaxis of the diseases, and as a pharmaceutical. SNP containing oligonucleotides are useful in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA sequences AAH62100 - AAH62688 represent segments of human genes which
New nucleic acid segment comprising one of the 10 - 100 bp sequences given in the specification (sequences of a polymorphic site), or the complement of the segment and a method of analysing a nucleic acid comprising determining the base occupying the polymorphic site of the polymorphic fragment sequences are disclosed in the specification. The information obtained from nucleic acid analysis by the method described is useful in diagnosis or monitoring of diseases like cancer, inflammation, heart disease, CNS diseases, and susceptibility to infection by microorganisms. In addition, the nucleic acid segments are useful in manufacturing medication in the treatment of prophylaxis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New nucleic acid segments of the human genome, particularly from genes including polymorphic sites, for phenotype correlation, forensics, paternity testing, medicine and genetic analysis.
                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Single nucleotide polymorphism; SNP; human; cancer; inflammation; heart disease; paternity testing; forensic science; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /standard_name= "single nucleotide polymorphism"
                                                                                                                                                                                                       diseases, and also the use of the DNA segments as pharmaceutical
                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                 Length 21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synaptotagmin 5 polymorphism containing DNA fragment #557.
                                                                                                                                                                                                                                                                                                                        2; Indels
                                                                                                                                                                                                                                            Sequence 21 BP; 8 A; 2 C; 4 G; 6 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                 Score 13.8; DB 1;
Pred. No. 3.8e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 74; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lander
                                                                                                                                                                                                                                                                                                                            ·,
                                                                                                                                                                                                                                                                                                                                                                   896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                replace (11, A)
                                                                                                                                                                                                                                                                                     4.8%;
                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-NOV-2000; 2000WO-US031639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99US-0167334P
                                                                                                                                                                                                                                                                 Very Match
Best Local Similarity 88.40,
                                                                                                                                                                                                                                                                                                                                                                 880 CTGAGATGCACTTACTT
                                                                                                                                                                                                                                                                                                                                                                                                        CTGAAATGCARTTACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH62656 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ireland JS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-367705/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200138576-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     12-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cargill M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
Variation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAH62656;
                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAH62656/
```

83

Forward PCR primer for uidA gene

(first entry)

22-SEP-2003

ACC84120;

BP

ACC84120 standard; DNA; 21

RESULT 153

ACC84120,

2 ATCATCACCATCACCAT 18

d

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a rat highly sensitive to carcinogen with its normal function of gap junction inhibited. Also described: (1) constructing the transgenic rats by obtaining a plasmid vector through integration of a mutated rat connexin cDNA to the downstream of a promoter, followed by microinjection of such plasmid vector into a fertilised egg and transplantation to the oviduct; (2) detecting carcinogens by administering a test substance into the rat, and (3) screening anticancer substances by administering a test substance into the rat that is highly sensitive to carcinogens to induce cancer onset. The rats are applicable in detecting carcinogens and screening anticancer sensitively. These animals can be used for efficient screening of anticancer drugs. With this method, carcinogens can be detected quickly and highly sensitively. These animals can be used for efficient screening of anticancer drugs. Mith this method to be used for efficient screening of anticancer drugs. The present sequence represents an oligonucleotide
applications such as phenotype correlation, forensics, paternity testing, medicine and genetic analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Highly carcinogen-sensitive transgenic rats with partial deletion of connexin gene to inhibit normal function of gap junction, applicable in detecting carcinogens and screening anticancer drugs.
                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rat; carcinogen; transgenic rat; connexin; cancer; cytostatic, Gjbl; anticancer; gap junction membrane channel protein beta 1; ss.
                                                                                                                                                        ;
0
                                                                                                          Query Match 4.8%; Score 13.8; DB 1; Length 21; Best Local Similarity 88.2%; Pred. No. 3.8e+02; Matches 15; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rat Gjb1 related insertion oligonucleotide SEQ ID NO:3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         which is used in an example from the present invention
                                                                   Sequence 21 BP; 2 A; 3 C; 12 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 7 A; 8 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (NISC-) JAPAN SCI & TECHNOLOGY CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hokaiwado N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Fig 1; 31pp; Japanese.
                                                                                                                                                                                           920 CATCACCACCACCTCC 936
                                                                                                                                                                                                                       CATGACCACCACCTGC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-AUG-2001; 2001JP-00253241.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-AUG-2002; 2002WO-JP008373
                                                                                                                                                                                                                                                                                                                                         ACC49466 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                          26-JUN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Asamoto M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-290002/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rattus norvegicus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003017756-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shirai T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                  ACC49466;
                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                     ACC49466
        SSXS
                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                             à
```

```
The present sequence is a forward PCR primer for the uidh (GUS) gene. Use with the reverse primer given in ACC84121 amplifies a 1.27 kb fragment within the uidh gene coding region. The invention discloses a method of transforming intact plants, allowing transformation e.g. of elite germplasm. Seedlings are directly incollated with a virulent strain of Agrobacterium tumefaciens, subjected to selection, and then generated directly into plants. The process is genotype-independent and rapid, since tissues do not pass through a dedifferentiation step to callus, and plant regeneration is not dependent on shoot organogenesis or somatic mbryogenesis. Somaclonal variation is reduced. The method can be used with a gymnosperm (conifer, especially pine), or an angiosperm (monocot or dicot). Transformation of pine (Pinus taeda L.) was used as an example of the method. An A. tumefaciens strain harbouring super-virulent pribo542 was used to incoulate intact germinated pine seedlings. PCR was used to screen for Agrobacterium contamination and for transferred genes, such as uidh, in the regenerated plants
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Transforming intact plant tissue by germinating an intact plant seeding having a shoot apex and directly inoculating the shoot apex of the germinated intact plant seedling with Agrobacterium tumefaciens to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.8%; Score 13.8; DB 1; Length 21;
88.2%; Pred. No. 3.8e+02;
ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 21 BP; 4 A; 3 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                             UidA gene; transgenic plant; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                       (TEXA ) UNIV TEXAS A & M SYSTEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example; Page 8; 23pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            910 ATCAGATTATCATCACC 926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                              03-DEC-2002; 2002WO-US038428
                                                                                                                                                                                                                                                                                                      04-DEC-2001; 2001US-0336809P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20 AGCCGATTATCATCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ50930 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 88.2
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                transform the seedling
                                                                                                                                                                                                                                                                                                                                                                                Newton RJ;
                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-505297/47.
                                                                                                                                                   Escherichia coli.
                                                                                                                                                                                      WO2003048369-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
                                                                                                                                                                                                                           12-JUN-2003.
                                                                                                                                                                                                                                                                                                                                                                            Gould JH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ50930;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ50930/c
ID AAQ5(
XX
AC AAQ5(
XX
DT 25-M
ð
```

ő

918 ATCATCACCACCCT 934

(revised)

. 0

Gaps

..

4.8%; Score 13.8; DB 1; Length 21; ilarity 88.2%; Pred. No. 3.8e+02; Conservative 0; Mismatches 2; Indels

Query Match Best Local Similarity Matches 15; Conserv

```
/*tag= a //note= "at least one (and preferably all) of the backbone subunits are composed of amide units, so that the oligomer consists of the nucleobases attached covalently to a polyamide backbone"
                                                                                                                                                                                                                                                                                                                                                           Antisense oligonucleotides which target human VCAM-1 were synthesised the phosphorothicate form. The oligonucleotides are useful to treat diseases which are modulated by changes in intercellular adhesion molecules. This sequence corresponds to nucleotides 2038-2057 of the coding region of human VCAM-1. (Updated on 25-MAR-2003 to correct PN
                                                                                                                                                                                                                                                                      Oligo:nucleotide modulation of cell adhesion - used in the treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          peptide nucleic acid; PNA; intercellular adhesion molecule; ICAM-1; endothelial leukocyte; BLAM-1; vascular; VCAM-1; antiinflammatory; anticancer; antimetastatic; anti-AIDS; anti-rhinoviral; ss.
                                                                                                                                                                                                                                                                                         e.g. psoriasis, inflammatory bowel disease or malignant melanoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Peptide nucleic acid oligomer targetting VCAM-1 coding region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 13.6; DB 1; Length 20;
Pred. No. 3.9e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 0 A; 8 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                           Claim 43; Page 64; 101pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       825 CTGTGTCTCTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 crerercierciececr 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                     92US-00939855.
93US-00007997.
93US-00063167.
                                                     93WO-US008101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94WO-US009026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93US-00102650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT01809 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bennett CF, Mirabelli CK;
                                                                                                                                                                                                 Mirabelli CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16; Conservative
                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          '*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PHARM INC
                                                                                                                                                                                                                                      WPI; 1994-100869/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9504749-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SISI (-SISI)
                                                     27-AUG-1993;
                                                                                         02-SEP-1992;
                                                                                                          21-JAN-1993;
                                                                                                                             17-MAY-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-AUG-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-DEC-1995
                 17-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-FEB-1995
                                                                                                                                                                                                 Bennet CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT01809;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                           field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
AAT01809
ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         심
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Primers corresp. to DNA coding for part of the beta-chain of the T cell antigen receptor (pref. the Variable region primers AAQ50905- AAQ50926) are used in PCR to amplify the T cell antigen receptor gene. The amplified gene is detected by the single-strand conformation polymorphism method using hybridisation probes corresp. to the beta-chain J domain (see AAQ50928-Q50940). (Updated on 25-MAR-2003 to correct PN field.)
                                                                      RT-PCR; polymerase chain reaction; amplification; SSCP; J-domain;
single-strand conformation polymorphism; joining domain; subtype beta 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human vascular cell adhesion molecule; VCAM-1; cell adherence; modulation; inflammation; psoriasis; malignant melanoma; inhibition; inflammatory bowel disease; antisense oligonucleotide; therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gene - in cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Detection of expression of T-cell antigen receptor gene - in caviral or immune disease patients, by polymerase chain reaction amplification of the gene and SSCP analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·
0
                                                                                                                                                                                                                                                                                                                                                                                                   ۲;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
4.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 3.9e+02;
Matches 16; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense oligonucleotide which targets human VCAM-1 gene.
                                                                                                                                                                                                                                                                                                                                                                                                   Sakoda H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Location/Qualifiers
1. .20.
/*tag. a
/*tote= "in phosphorothioate form"
                                    T-cell antigen receptor J-betal.3 probe
                                                                                                                                                                                                                                                                                                                                                                                                 Nishioka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 24; 47pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          957 AGCCAAATTGACTCTCTAAA 976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCCAACTTCCCTCTCCAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                         92JP-00111467.
92JP-00205054.
                                                                                                                                                                                                                                                     93WO-JP000577
                                                                                                                                                                                                                                                                                                                                              (TAIS ) TAISHO PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAQ44560 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                 Mizushima Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                 LIT INST CO LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1993-368813/46.
                                                                                                                                                                                WO9322455-A1
                                                                                                                                                                                                                                                       30-APR-1993;
                                                                                                                                                                                                                                                                                           30-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               misc feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9405333-A1
                                                                                                                                                                                                                                                                                                              31-JUL-1992;
                                                                                                                                                                                                                                                                                                                                                                                                     Yamamoto K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAR-2003
26-SEP-1994
19-MAY-1994
                                                                                                                                                                                                                 11-NOV-1993
                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ44560;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
```

RESULT 155 AAQ44560

à

0

Gaps

.; 0

i,

οĘ

WPI; 1995-090842/12 Query Match 

```
New peptide nucleic acid oligomers hybridising to adhesion molecule genes - are stable anti:sense cpds. of high affinity, partic. for treating inflammation, viral infection, cancer etc.
                                                                                                                                                                                              Claim 18; Page 45; 57pp; English.
```

New oligomers are claimed which (A) have at least one peptide nucleic acid (PAM) subunit and (B) have a sequence hybridisable to AUG region, coding region, 5'-untranslated region of 1'-untranslated region of ICAM-1 or ELAM-1, or hybridisable to AUG region, coding region, 5'-untranslated region of VCAM-1.

Or ELAM-1, or hybridisable to AUG region, coding region of VCAM-1.

The PNAs can be used to target RNA and single stranded DNA (SSDNA) to produce antisense-type gene regulation moieties. Hence they may be used antimetastatic agents to accomplementation moieties, antichancer agents, and as econd PNA strand binds with the resulting double helix or with the first PNA strand. The PNA strand binds with the resulting double helix or with the first PNA strand. The PNA program and are water soluble, which facilitates cellular uptake. Further, since they contain amides of non-biological amino acids, they are biostable and resistant to enzymatic degradation by protenses. The present sequence targets vascular and acids agents agents agents agents agents agents. proteases. The present (VCAM-1) coding region cell adhesion molecule-i

Sequence 20 BP; 0 A; 8 C; 4 G; 8 T; 0 U; 0 Other;

4.7%; Score 13.6; DB 1; Length 20; 30.0%; Pred. No. 3.9e+02; 4; Indels 0; Mismatches 825 CTGTGTCTTTTTTTTTTT 844 crérérerererereser 20 80.08; Conservative Local Similarity les 16; Conserv Matches ð 엄

ö

Gaps

.; 0

AAT08661 standard; DNA; 20 BP 05-SEP-1996 AAT08661; RESULT 157 AAT08661 THE STANK ST

(first entry)

Primer P53-5X2P for p53 gene exon 2 amplification.

primer; PCR; polymerase chain reaction; hierarchy; immunoassay; quantitative assay; fragment length; DNA sequencing; p53; mutation; ss.

WO9601909-A1

25-JAN-1996

07-JUL-1995;

95WO-US008605.

95US-00388381, 94US-00271946 08-JUL-1994; 14-FEB-1995; (VISI-) VISIBLE GENETICS INC

Stevens JK; Dunn JM, WPI; 1996-097638/10. Diamandis E,

Testing for disease-associated p53 gene mutation(s) using a hierarchy of assay techniques - e.g. immunoassay, DNA amplification and DNA sequencing

AAT30211-T30233, AAT33058-T33112 and AAT36667-T36684 represent antisense oligonucleotides of the invention. These sequences target regions of the

Example 10; Page 31; 92pp; English.

rejection

Oligo:nucleotide targetted to a nucleic acid sequence encoding ICAM-1, ELAM-1 or VCAM-1 - useful for treating or preventing allo:graft

Stepkowski SM;

Bennett CF,

WPI; 1996-268321/27.

(ISIS-) ISIS PHARM INC. (TEXA ) UNIV TEXAS SYSTEM.

95WO-US015536. 94US-00344155.

22-NOV-1995; 23-NOV-1994;

WO9615780-A1

30-MAY-1996.

```
Rapid and cost effective diagnosis of disease-associated mutations in the p53 gene is achieved by employing a selected number of diagnostic tools, in a hierarchy of increasing accuracy and cost per tool, in which each tool detects essentially no false positives. Tests that may be employed, in order of increasing accuracy and cost are: (a) immunoassays, (b) DNA fragment length/quantity analysis; and (c) DNA sequencing of regions most likely to harbour point mutations. AATO8645-66 are primers used in DNA fragment length/quantity analysis. The amplification of the eleven exons is advantageously carried out in 3 multiplex positives of a pool selected because they all use the same hybridisation temperature and none of the expected fragment lengths will more in a material and contact the same hybridisation temperature
                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                  and none of the expected fragment lengths will overlap in an electrophoresis gel. One of each pair of primers is labeled at the 5' end with an identifiable marker such as fluorescein, rhodamine or cyanine. The present sequence is used with AAT08662 to amplify a 261 bp fragment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ICAM-1; endothelial leukocyte adhesion molecule-1; ELAM-1; E-selectin; vascular cell adhesion molecule-1; VCAM-1; white blood cell; brequinar; vascular endothelium; allograft rejection; immunosuppression; rapamyoin; anti-1ymphocyte serum; monoclonal antibody; cardiac allograft; therapy; renal allograft rejection; donor-specific transplant tolerance; LFA-1;
                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense oligonucleotide; human; intracellular adhesion molecule-1;
                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                   4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.9e+02; ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 4 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense oligonucleotide ISIS 5876.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         813 ACTCAGGGTTGGCTGTGTCT 832
               Claim 20; Page 22; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 ACCCAGGGTTGGAAGCGTCT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT33085 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-JAN-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                       16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                              exon 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT33085;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 158
                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT33085
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

rng.res

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This is the nucleotide sequence of an antisense oligodeoxyribonucleotides used in the method of the invention, involving the use of the human Delta 3 protein. The Delta3 gene is involved in the growth and differentiation of cells. Delta3 agonists can be used for promoting the tissue
                  endothelial leukocyte adhesion molecule-1 (ELAM-1, also known as Eselectin), or vascular cell adhesion molecule-1 (VCAM-1). This sequence targets the coding region (nuclectides 2038-2057) of VCAM-1. ICAM-1, ELAM -1, and VCAM-1 represent three of the five cell adhesion molecules involved in the adherence of white blood cells to vascular endothelium. These sequences can be used in a composition for treating allograft
                                                                                                                                     rejection. The composition contains one of these sequences in combination with an immunosuppressive agent. The immunosuppressive agent used in the compositions is brequinar, rapamycin, anti-lymphocyte serum, a monoclonal antibody against LRA-1 or an antisense oligonucleotide. The compositions can be used for treating or preventing allograft rejection, such as cardiac or renal allograft rejection. By using these compositions, allograft survival times are extended, and donor-specific transplant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated human Delta3 gene - used to develop products for treating, e.g. nerve injury, neurodegenerative disorders, peripheral neuropathies and spinocerebella degenerations.
sequences for human intercellular adhesion molecule-1 (ICAM-1),
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          neurodegenerative disease; neurodifferentiative disorder; neurodevelopmental disorder; peripheral neuropathy; spinocerebella degeneration; antagonist; neoplastic disease; hyperplastic disease; cancer; Waldenstroem's macroglobulemia; fibroproliferative disorder; cerebravascular tissue; gene therapy; antibody; oligodeoxyribonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleotide sequence of an antisense oligodeoxyribonucleotide
                                                                                                                                                                                                                                                                                                                                                           Query Match 4.7%; Score 13.6; DB 1; Length 20; Best Local Similarity 80.0%; Pred. No. 3.9e+02; Matches 16; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; Delta 3 protein; agonist; tissue regeneration;
                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 0 A; 8 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MILL-) MILLENNIUM BIOTHERAPEUTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 38; 160pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                               825 CTGTGTCTCTTTCTTCTT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  crererererererer 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98WO-US006775.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-00832633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-00872855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV68532 standard; cDNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gearing DP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-594482/50.
                                                                                                                                                                                                                                                                                      tolerance is induced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9845434-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV68532;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mccarthy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV68532/
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyngitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAX34584- AAX35879) can be used in immunogenic compositions as vaccines. Vectors containing C. pneumoniae especially where the vector directs the expression of a neutralising epitope of C. pneumoniae
                                                                                                                                                                                                                                            0
regeneration or repair needed to treat a nerve injury, neurodegenerative disease, neurodifferentiative or neurodevelopmental disorders including peripheral neuropathies and spinocrebella degenerations. Delta3 antagonists can be used to treat neoplastic or hyperplastic diseases, e.g. cancers, Waldenstroem's macroglobulemia and fibroproliferative disorders, particularly of cerebravascular tissue. The nucleic acids can also be used for gene therapy. The products can also be used for antibody production, detection, diagnosis and drug screening
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; neutralising epitope; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0:
                                                                                                                                                                                                                                            ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Primer used to amplify Chlamydia pneumoniae polynucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match

4.7%; Score 13.6; DB 1; Length 20;
Best Local Similarity 80.0%; Pred. No. 3.9e+02;
Matches 16; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                        4.7%; Score 13.6; DB 1; Length 20; 30.0%; Pred. No. 3.9e+02;
                                                                                                                                                                                                                                            4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 3 A; 5 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                  Sequence 20 BP; 2 A; 6 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genome sequence of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Page 1887; Disclosure; 1912pp; English.
                                                                                                                                                                                                                                                                                948 CGCAAGAAGAGCCAAATTGA 967
                                                                                                                                                                                                                                                                                                      20 CGCGAACAGAGCCAGATTGA 1
                                                                                                                                                                                                                                                                                                                                                                                                           AAX97227 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98WO-IB001890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97FR-00014673
98US-0107078P
                                                                                                                                                                                                          Query Match
Best Local Similarity 80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chlamydophila pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-357842/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9927105-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-JUN-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX97227;
                                                                                                                                                                                                                                                                                                                                                                         RESULT 160
                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                           AAX97227,
                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                    a
```

```
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae (see AAX91990). C. pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyngitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAY34584- AAY35879) can be used
                                                                                                                                                                   Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine; neutralising epitope; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    in immunogenic compositions as vaccines. Vectors containing C. pneumoniae mucleotides sequences can also be used as immunogenic compositions, especially where the vector directs the expression of a neutralising epitope of C. pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.9e+02; ve 0; Mismatches 4; Indels
                                                                                                                                                 PCR primer used to amplify an ORF of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 3 A; 2 C; 8 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                               Genome sequence of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 1486; Disclosure; 1912pp; English
         954 AAGAGCCAAATTGACTCTCT 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         740 CITGGIAGGGICCCAGGGIC 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             crredragecrreragaere 20
                            20 Aggadccacaccactrcrcr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA55728 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                            98WO-IB001890
                                                                                                                                                                                                                                                                                                                97FR-00014673.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80.08;
                                                                                 AAX92117 standard; DNA; 20
                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 80.0°
Matches 16; Conservative
                                                                                                                                                                                                                           Chlamydophila pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-357842/30.
                                                                                                                                                                                                                                                                                                                                                 (GEST ) GENSET
                                                                                                                                                                                                                                                W09927105-A2
                                                                                                                                                                                                                                                                                            20-NOV-1998;
                                                                                                                                                                                                                                                                                                                21-NOV-1997;
04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-AUG-2000
                                                                                                                            13-SEP-1999
                                                                                                                                                                                                                                                                       03-JUN-1999.
                                                                                                                                                                                                                                                                                                                                                                     Griffais R;
                                                                                                                                                                                                                  Synthetic
                                                                                                        AAX92117;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA55728;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA55728/C

1D AAA5572

XX

AC AAA5573

XX

DT 30-AUG-
                                                              RESULT 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 162
                                                                         AAX92117
                           g
                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
```

```
The present invention relates to antisense oligonucleotides (see AAA55496 -A55757) which are targeted to nucleic acids encoding a human tumour necrosis factor receptor-associated factor (TRAF). The antisense sequences comprise at least one modified internucleotide linkage, which is a phosphorothicate linkage. The oligonucleotides also include at least one modified sugar moiety such as a 2'0-methoxyethyl sugar moiety. Sequences AAA5490-A55495 represent nucleotide sequences encoding human TRAFI-6. Included in the invention is a method for treating a human administering an antisense oligonucleotide. The reduction of jun kinase activation in cells comprises contacting the cells with an antisense oligonucleotide the reduction of E-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      selectin expression in cells or tissues comprises contacting the cells or tissues with an antisense oligonucleotide targeted to TRAF-2 or TRAF-6. The antisense oligonucleotides have antiproliferative and anti-inflammatory activity and are useful for treating disorders associated with cell proliferation and inflammation. The antisense oligonucleotides may also be used as a diagnostic probe for studying gene function
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense oligonucleotides targeted to nucleic acids encoding human tumor necrosis factor receptor-associated factor (TRAF), useful for treating diseases associated with TRAF expression such as inflammatory diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hepatitis B virus, HBV; Hepatitis A virus, HAV, probe, detection, mutation, high-density gene chip, ss.
                                                          Tumour necrosis factor receptor-associated factor, TRAF, human, antisense oligonucleotide, phosphorothioate, antiproliferative, anti-inflammatory, E-selectin, jun kinase, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 13.6; DB 1; Length 20; Pred. No. 3.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hepatitis B virus related oligonucleotide probe #207.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 3 A; 7 C; 6 G; 4 T; 0 U; 0 Other;
rRAF1 antisense oligonucleotide ISIS# 101879.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Xu XS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 33; Page 100; 170pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Monia BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            800 GAGCTCTCCTCCAACTCAGG 819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGATGGCCTCCAGCTCAGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA79944 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                          99WO-US023171.
                                                                                                                                                                                                                                                                                                                                                                                                                    98US-00167109.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-303732/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hepatitis B virus.
                                                                                                                                                                                                                                     WO200020435-A1.
                                                                                                                                                                                                                                                                                                                                                       05-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                    06-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-NOV-2000
                                                                                                                                                                                                                                                                                            3-APR-2000
                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA79944;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
```

·;

```
Example 1; Fig 15; 19pp; Chinese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SO COCOCOCO COCOCO COCO
  g
                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                   The present invention describes a method which comprises making a high-density gene chip, specifically for making high-density micro-array of oligomucleotide probes. An oligomucleotide probe selecting process to seek preferentially length variable and coverage variable probes is provided to ensure identical cross melting temperature of probes is provided to ensure identical cross melting temperature of probes is relatively simple and raise the cross control of gene chip results. The process proposes a specific probe selection method for detecting target sequence directly, detecting mutation in both specific and non-specific sites and a probe overall arrangement scheme. AAA79738 to AAA80201 represent invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B virus; HBV; Hepatitis A virus; HAV; probe; detection; high-density gene chip; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ő
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.7%; Score 13.6; DB 1; Length 20; 10.0%; Pred. No. 3.9e+02; ve 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hepatitis B virus related oligonucleotide probe #208.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              High-density gene chip making process.
                                                                                                                                                                                                                                                                               High-density gene chip making process.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     753 CAGGGTCCCTAGGCCTCCAC 772
                                                                                                                                                                                                                                                                                                                      Example 1; Fig 15; 19pp; Chinese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cassarcerrassacracae 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAA79945 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99CN-00114460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99CN-00114460
                                                                                99CN-00114460
                                                                                                                     99CN-00114460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 80.0%;
es 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wang Y;
                                                                                                                                                                                                   Wang Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYDO-) UNIV DONGNAN
                                                                                                                                                              DONGNAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-443233/39.
                                                                                                                                                                                                                                      WPI; 2000-443233/39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lu Z,
                                                                                                                                                                                                   Lu Z,
                                                                                                                                                              AIND (-OGKD)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-SEP-1999;
                                                                              24-SEP-1999;
                                                                                                                       24-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CN1252452-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-MAY-2000
    CN1252452-A.
                                         10-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hepatitis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mutation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA79945;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                   Sun X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sun X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA79945,
    셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This sequence represents a PCR primer used in nested PCR amplifications for the isolation of 13 granulocytic ehrlichia (GE) genes WII, WIZ, WI3, WH4, WIC, NY1, WY2, WI3, SWED, BOV, EQ, SLOVI, and SLOV2 isolated from 13 different GE clones from a dog, a cow, a horse and ten humans. The primer is based on the GE160 nucleotide sequence. Granulocytic ehrlichia is the causative agent of granulocytic ehrlichiosis, an acute potentially fatal tick-borne infection. A vaccine comprising a GE nucleic acid molecule or the polypeptide that it encodes, is used for producing an immune response in a host to prevent granulocytic ehrlichiosis in an animal. The protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel granulocytic ehrlichia nucleic acid molecules, their polypeptides useful as vaccines for treating ehrlichiosis in mammals e.g. humans, pigs
                                                                                                        seek preferentially length variable and coverage variable probes is provided to ensure identical cross melting temperature of probes to the maximum limit, and this can make the cross control of gene chip relatively simple and raise the relability of the gene chip detecting results. The process proposes a specific probe selection method for and non-specific sequence directly, detecting mutation in both specific and non-specific sites and a probe overall arrangement scheme. AAA9738 to AAA80201 represent oligonucleotide probe sequences which are used in
The present invention describes a method which comprises making a high-density gene chip, specifically for making high-density micro-array of oligonucleotide probes. An oligonucleotide probe selecting process to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Granulocytic ehrlichia, granulocytic ehrlichiosis, vaccine; GE160,
prevent; treatment; tick-borne infection; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequences can be used to detect anti-GE antibodies in an animal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 5 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Forward PCR primer AQ4F used to isolate GE genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 13.6; DB 1;
Pred. No. 3.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (AQUI-) AQUILA BIOPHARMACEUTICALS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                     examples from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 46; 192pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              752 CCAGGGTCCCTAGGCCTCCA 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20 ccassarccrrassacraca 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ92255 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.7%;
80.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-US022512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0094381P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-195304/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Massung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200006744-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ehrlichia sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-FEB-2000,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Murphy CI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ92255;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and dogs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
```

```
.;
0
                             Gaps
                             .
0
        Length 20;
                           Indels
    Score 13.6; DB 1;
Pred. No. 3.9e+02;
0; Mismatches 4;
                                                882 GAGATGCACTTACTTCAG 901
    4.7%;
Query Match
Best Local Similarity 80.0°
Matches 16; Conservative
                                                                    셤
                                               ò
```

1 GAGCTGCAATTACTTCCGAG 20

RESULT 166 AAZ48952

AAZ48952 standard; DNA; 20

BP.

AAZ48952;

29-MAR-2000 (first entry)

Human VCAM-1 antisense inhibitor, ISIS #5876.

Antisense inhibitor; human; ICAM-1; intercellular adhesion molecule-1; vascular cell adhesion molecule-1; hyperproliferative disorder; VCAM-1; endothelial leukocyte adhesion molecule-1; bIAM-1; skin condition; cancer; viral infection; tumour; dispedesis; graft versus host disease; arthritis; infection; autoimmune disorder; multiple sclerosis; stroke; juvenile diabetes mellitus; arthritis; myssthemia gravis; therapy; pemphigus vulgaris; systemic lupus erythematosus; acute myocarditis; cardiovascular disorder; dilated cardiomyopathy; ischaemic heart disease; 

Homo sapiens

WO9961462-A1

02-DEC-1999

99WO-US011548 26-MAY-1999; 98US-00085759 27-MAY-1998;

PHARM INC SISI (-SISI)

Baker BF; Mirabelli CK, Sennett CF,

WPI; 2000-072600/06.

New antisense oligonucleotides, used for treating e.g. inflammatory conditions, psoriasis, graft rejection, cancers, infections, cardiovascular disorders or autoimmune disorders.

Example 17; Page 82; 199pp; English

This sequence is an antisense oligonucleotide of the invention. The antisense oligonucleotides are targeted to a nucleic acid encoding a callular adhesion molecule (CAM) and is capable of modulating the expression of the CAM. They particularly inhibit intercellular adhesion molecule-1 (UCAM-1), or molecule-1 (ICAM-1), rotal activation molecule-1 (UCAM-1), or capable adhesion molecule-1 (UCAM-1), or molecule-1 (ICAM-1). The antisense oligonucleotides can be used to modulate CAM activity in mediating cell:cell interactions and subsequent cellular and biological responses, coll:cell interactions and subsequent cellular and biological responses, cell:cell interactions and subsequent cellular and biological responses. They can be used for treating an animal suspected of having or being prone to a disease or condition associated with a CAM. Oligonucleotides condition e.g. inflammatory bowel disease such as Crohn's disease, condition e.g. inflammatory bowel disease such as Crohn's disease, condition e.g. inflammatory bowel disease such as Crohn's disease, condition e.g. inflammatory bowel disease such as Crohn's disease, condition e.g. inflammatory conticion a viral infection. The ICAM-1 sequences can also be used for reducing corticosteroid use in a patient or for reducing cyclosporine use in a patient. The oligonucleotides can also be used for treating e.g. theyperproliferative diseases, tumours, diapedesis, graft versus host

30 nucleobases in length that are capable of inhibiting the expression of phosphoenol pyruvate carboxykinase-cytosolic (PBPCK-cytosolic). The antisense compounds are useful for inhibiting the expression of PEPCK-cytosolic in cells or tissues. They are commonly used as research reagents and in diagnostics, e.g. to elucidate the function of particular genes. They are also useful for distinguishing between functions of various members of a biological pathway and for research use. The

The present sequence is one of a number of antisense compounds of up

Claim 1; Col 43; 64pp; English

antisense compounds are also useful prophylactically, e.g. to prevent or delay infection, inflammation or tumour formation. The present sequence is a chimeric phosphorothioate oligonucleotide with 2'-MOE wings and a

0

Gaps

.. 0

4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.9e+02; cive 0; Mismatches 4; Indels

Conservative

Local Similarity nes 16; Conserv

Matches

Query Match

Sequence 20 BP; 6 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

```
o;
                                                                                                                                                                                                                                                                                                                                                                            Human, antiinflammatory, cytostatic; antisense gene therapy;
phosphoenol pyruvate carboxykinase-cytosolic; PEPCK-cytosolic; infection;
inflammation; tumour formation; phosphorothioate; ss.
disease, arthritis, infections, autoimmune disorders, e.g. autoimmune thyroid disorders, autoimmune forms of arthritis, multiple sclerosis, some forms of juvenile diabetes mellitus, myasthenia gravis, pemphigus vulgaris, systemic lupus erythematosus, cardiovascular disorders, myocardial ischaemia/reperfusion injury, dilated cardiomyopathy, acute myocarditis, ischaemic heart disease or stroke
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense compound capable of modulating the expression of phosphoenol pyruvate carboxykinase-cytosolic, useful for preventing or delaying infection, inflammation or tumor formation.
                                                                                                                                                    Gaps
                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                   Human PEPCK-cytosolic antisense oligonucleotide ISIS 108079.
                                                                                                                         Length 20;
                                                                                                                                                  4; Indels
                                                                                            Sequence 20 BP; 0 A; 8 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                        Score 13.6; DB 1;
Pred. No. 3.9e+02;
                                                                                                              4.7%; Scc...
80.0%; Pred. No. s...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cowsert LM;
                                                                                                                                                                          825 CTGTGTCTTTTTTTTTTTT 844
                                                                                                                                                                                                   1 crererciercieciceci 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mckay R, Butler MM, Wyatt J,
                                                                                                                                                                                                                                                                     AAF62909 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JAN-2000; 2000US-00488671.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JAN-2000; 2000US-00488671
                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                   Local Similarity 80.0
nes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-190979/19
                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                            US6187545-B1
                                                                                                                                                                                                                                                                                                                          08-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-FEB-2001.
                                                                                                                                                                                                                                                                                                AAF62909;
                                                                                                                        Query Match
                                                                                                                                                                                                                                         RESULT 167
                                                                                                                                                 Matches
                                                                                                                                                                                                                                                        AAF62909
                                                                                                                                                                                                                                                                                              8x20000x8
                                                                                                                                                                          ð
```

δ g

```
Human; antisense; lung dysfunction, nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiinsthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human oligonucleotide sequence.
                                                                                                     (CORR ) CORNELL RES FOUND INC
                                                04-APR-2001; 2001WO-US010958.
                                                                          14-APR-2000; 2000US-0197271P.
WO200179548-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-0CT-2003
                          25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABZ85647;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes a novel alkaline cellulase gene from a Bacillus sp. The alkaline cellulase gene is used for the preparation of an alkaline cellulase useful as a textile detergent and a textile treating agent. This sequence represents a PCR primer used in the amplification of the Bacillus sp. alkaline cellulase described in the method of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; K-ras; PCR primer; probe; capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                          Alkaline cellulase gene useful for the preparation of an alkaline cellulase useful as a textile detergent and a textile treating agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                 Alkaline cellulase; N131b; textile; detergent; treating agent;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.9e+02; Ative 0; Mismatches 4; Indels
                                                                                                                                                                       Bacillus sp alkaline cellulase PCR primer SEQ ID 12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Capture oligonucleptide Zip ID#3839 oligo #9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 6; Page 20; 22pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                843 CTGAAGACAGCGTCCTGGCT 862
  865 AGTIGGAACACTITCCIGAG 884
                       1 AATGGGAACACCTTCCGGAG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        crecaercaecerceeacr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP
                                                                                            AAI69296 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                      24-FEB-2000; 2000JP-00047237.
                                                                                                                                                                                                                                                                                                                                             24-FEB-2000; 2000JP-00047237.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABI96752 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-029359/04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 16; Conserv
                                                                                                                                                                                                                                                                                                                                                                       (KAOS ) KAO CORP.
                                                                                                                                                                                                                                                                  JP2001231569-A.
                                                                                                                                                                                                                PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-FEB-2002
                                                                                                                                                                                                                                        Bacillus sp.
                                                                                                                                                08-FEB-2002
                                                                                                                                                                                                                                                                                          28-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABI96752;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                      AA169296;
                                                                 ABI96752
```

à g 

```
Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCAI gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the particular sites and identifying if ligation of the oligomuclectide probe patt occurred and correlating (using a computer) identified ligation to a presence or absence of the target nucleotide sequences. ABIS2074 to
                                                                                                                                                                                                                                                                                                                                                                                                                                         (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents e.g. Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents e.g. Cryptococcus neoformans, Candida albicans and Aspergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects.
                                                                                                                                           Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
                                                                                                                                                                                                                                                                                                                                     The present invention describes a method (M1) for designing capture oligonuclectide probes (I) for use on a support to which complementary oligonuclectide probes (II) will hybridise with little mismatch, where
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.9e+02; ve 0; Mismatches 4; Indels
Kliman R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 6 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
Favis R,
                                                                                                                                                                                                                                                                      Example 5; Fig 29; 300pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              741 Trggragggrcccagggrcc 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Trestrecerceaageree 1
Gerry NP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  80.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABZ85647 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 80.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the present invention
Zirvi M,
                                                                   WPI; 2002-034366/04.
   Barany F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABZ85647
```

ö

(first entry)

sapiens

```
The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the intiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or masal airway dysfunction and a second active agent comprising an antiinflammatory, antiallergic, antiasthmatic, hypotensive, an antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or mallganet disease or condition, also antiinflammatory steroid in a subject, for reducing or depteting levels of for entancing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject, st issue, or treating bronchoonstriction, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO are increased.
                                                                                                                                                                                                                                                                                                                                    Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 15; SEQ ID NO 889; 872pp; English.
                                                                                                    23-APR-2002; 2002WO-US013135.
                                                                                                                                                 24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                     (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                WPI; 2003-229219/22.
                 WO200285308-A2.
                                                            31-OCT-2002
                                                                                                                                                                                                                               Nyce JW, I
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                         ubiquinone.
```

Katz E, Pabalan J, Aguilar D;

Li Y, Sandrasagra A, Ka Tang L, Shahabuddin S;

Gaps ; 0 4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.9e+02; vative 0; Mismatches 4; Indels Sequence 20 BP; 5 A; 5 C; 6 G; 4 T; 0 U; 0 Other; at ftp.wipo.int/pub/published_pct_sequences Conservative Query Match Best Local Similarity Matches 16; Conserv

·,

g

ABZ87806 standard; DNA; 20 ABZ87806; RESULT 171 

17-OCT-2003 (first entry)

Human oligonucleotide sequence.

antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; Human; antisense; lung dysfunction; nasal airway dysfunction; lung inflammation; respiratory disease; ds

Homo sapiens

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the institucion codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an entiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antistrangenty steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject, stissue, or treating bronchoconstriction, increasing levels of upiquinone or lung surfactant in a subject of the subject Pharmaceutical composition for treating ailments associated with impaired lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid or Gaps Katz E, Pabalan J, Aguilar D; . 0 4.7%; Score 13.6; DB 1; Length 20; 10.0%; Pred. No. 3.9e+02; ve 0; Mismatches 4; Indels Sequence 20 BP; 14 A; 2 C; 4 G; 0 T; 0 U; 0 Other; at ftp.wipo.int/pub/published_pct_sequences Disclosure; SEQ ID NO 3048; 872pp; English. Li Y, Sandrasagra A, K. Tang L, Shahabuddin S; 825 CIGIGICICITITICITCIC 844 23-APR-2002; 2002WO-US013135. 24-APR-2001; 2001US-0286137P. (EPIG-) EPIGENESIS PHARM INC. 1 Similarity 80.0%; 16; Conservative WPI; 2003-229219/22. WO200285308-A2 31-OCT-2002. ubiquinone Miller S, Query Match Local Matches à

CTGGTTCTCTTTTTTTTCT 1 Human oligonucleotide sequence. BP. ABZ85417 standard; DNA; 20 (first entry) 17-OCT-2003 ABZ85417; 20 RESULT 172 ABZ85417/c 

0;

Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; Mypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

Homo sapiens

```
ACC46925
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S X E X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              first active agent comprising an oligonuclectide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polyapetide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory varied large activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of denosine receptor, producing bronchodilation, increasing levels of denosine receptor, producing bronchodilation, increasing levels of whiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung alleraties or a respiratory disease or condition, lung alleraties or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                              Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; G protein coupled receptor; GPR86 (P2X13); ostatic hypertrophy; migraine; vomiting; psychotic disorder; neurological disorder; detardation; neurodegenerative disease; thrombosis; dyskinesia; cardiovascular disease; autoimmune disorder; inflammatory disease; inflammatory disease; fertility dysfunction; pain; cancer; anorexia; cetal developmental disorder; infection; bulimia; asthma; osteoporosis; ulcer; allergy; benign prostatic hypertrophy; stroke; chromosome 3G24; Antimigraine; Antiemetic; Neuroleptic; Tranquilizer; Antidepressant;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel pharmaceutical composition, which has a
                                                                                                                                                                                                                                        Aguilar D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human G protein-coupled receptor GPR86 (P2Y13) PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4; Indels
                                                                                                                                                                                                                                          Pabalan J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 20 BP; 3 A; 3 C; 11 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                          Katz E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 15; SEQ ID NO 659; 872pp; English.
                                                                                                                                                                                                                                          Sandrasagra A, Ke
i, Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCAAGAGCTCTCCTCCAACT 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTAGAGCCCTCCCCCAGCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC00306 standard; DNA; 20 BP
                                                                                                              23-APR-2002; 2002WO-US013135.
                                                                                                                                                         24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                  (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                          Li Y, Sar
Tang L,
                                                                                                                                                                                                                                                                                                     WPI; 2003-229219/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 16; Conserv
                           WO200285308-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JUN-2003
                                                                   31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                    ubiquinone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC00306;
                                                                                                                                                                                                                                                               Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
                                                                                                                                                                                                                                               Nyce JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC00306
```

ð

```
method is useful forsecond a mechanical formation for an extension for an extension for a method is useful for screening a modulator of GPR86 activity. The method is useful for screening a modulator of GPR86 activity, and for determining if a candidate modulator increases or decreases the activity of GPR86. Identified modulators are useful in the manufacture of a pharmaceutical composition for preventing, treating and/or alleviating diseases or disorders characterised by dysregulation of GPR86 signalling cuch as ostatic hypertrophy, migraine, vomiting, psychotic and neurological disorders, including anxiety, depression, schizophrenia, manic depression, delirium, dementia, severe mental retardation, dependation, caperative diseases, neurodegenerative diseases such as Alzheimer's disease or Parkinson's disease, dyskinesias such as Authington's disease or Gilles de la Tourette's syndrome and other related diseases including thrombosis and other cardiovascular disease, autoimmune and inflammatory diseases, inflections such as bacterial, fungal, protozoan developmental disorders, inflections such as bacterial, fungal, protozoan and viral nfections such as infections caused by HIV-1 and HIV-2, pain, cancer, anorexia, bullanda, asthma, acute heart failure, hypertension, urinary retention, osteoporosis, angina pectoris, myccardial infarction, uncertiant of the invention. The gene for the GPR86 (P2X13) sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Screening for modulator of G protein coupled receptor, GPR86 activity, by incubating cells expressing GPR86 with candidate modulator and detecting signaling activity of the polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
Nootropic, Neuroprotective, Antiparkinsonian; Anticonvulsant; Anticoagulant; Thrombolytic; Cardiant; Immunosuppressive; Antiinflammatory; Antiinfertility; Antibacterial; Pungicide; Protozoacide; Virucide; Anti-HIV; Analgesic; Cytostatic; Metabolic; Antiasthmatic; Cardiant; Hypotensive; Osteoporosis; Antianginal; Antiulcer; Antiallergic; Cerebroprotective; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present invention relates to a method (M1) for screening for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.9e+02; rive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lannoy V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 0 A; 3 C; 6 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Detheux M, Brezillon S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 2; Page 62; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGTCTCTTTTCTTCTG 845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGTTTTTCTTCGGTG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-AUG-2002; 2002WO-EP008761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-AUG-2001; 2001US-00924125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Parmentier M, Boeynaems J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                illustrate the invention. I
located on chromosome 3q24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACC46925 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (EURO-) EUROSCREEN SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Suarez N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-256622/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                  WO2003014731-A2
                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16;
                                                                                                                                                                                                                                                                                                                                                                                                                                          20-FEB-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Communi D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC46925;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
```

ö

Neuroblastoma; prognosis; ds; oligonucleotide.

(CHIB-) CHIBA PREFECTURE. (HISM ) HISAMITSU PHARM CO LTD.

Nakagawara A;

31-MAY-2001; 2001JP-00163666. 24-AUG-2001; 2001JP-00255260.

30-MAY-2002; 2002WO-JP005295.

/mod_base= OTHER /note= "2'-O-methoxyethyl (2'-MOE) gapmer" 16. .20

'note= "phosphorothioate backbone"

1. .5 /*tag= b

mod_base= OTHER

ಹ

/*tag=

Location/Qualifiers

/note= "2'-O-methoxyethyl (2'-MOE) gapmer"

base= OTHER

ບ

/*tag= /mod_ba

WO2002103017-A1.

27-DEC-2002

Neuroblastoma-related DNA sequence #37.

(first entry)

22-SEP-2003

ABT43122 standard; DNA; 20

ABT43122

```
The present invention describes a compound (I) comprising 8-50 nucleobases which is targeted to a 5' untranslated region (UTR), coding, 3' UTR or intron region of a nucleic acid molecule encoding phospholipase A2, group IIA (synovial), where the compound specifically hybridises with Also described: (I) a composition comprising the compound and a carrier or diluent; (2) a method of inhibiting the expression of phospholipase A2, group IIA in cells or tissues; and (3) a method of treating an animal aving a disease or condition associated with phospholipase A2, group IIA having a disease or condition associated with phospholipase A2, group IIA antipsoriatic activities, and can be used in vaccines and in gene therapy. The compound (I) can be used for preparing a composition for treating or preventing inflammation, cancer, psoriasis or diabetes. The present sequence represents a human phospholipase A2 group IIA (synovial).
                                 Phospholipase A2 group IIA; synovial; antisense modulation; inflammation; phospholipase A2 group IIA inhibitor; phosphorothicate; antiinflammatory; antidiabetic; cytostatic; antipsoriatic; vaccine; gene therapy; cancer; psoriasis; diabetes; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Phospholipase A2, group IIA, useful for preparing a composition for treating or preventing inflammation, cancer, psoriasis or diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       compound that hybridizes with and inhibits the expression of
 Human phospholipase A2 antisense oligonuclectide SEQ ID NO:22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 4 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 3; Page 86; 135pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-MAY-2002; 2002WO-US016135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAY-2001; 2001US-00865866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 90.0%
....nes 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wyatt JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-140495/13.
                                                                                                                                                                                                                                                                                                                                                                                                                WO200297133-A1
                                                                                                                                                                                       modified_base
                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                            nodified base
                                                                                                                     Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bennett CF,
```

```
Gaps
                                                                                                                                                                                                                                Neuroblastoma; prognosis; spontaneous regression; primer; probe; ds;
                                              ö
                      Score 13.6; DB 1; Length 20;
Pred. No. 3.9e+02;
0; Mismatches 4; Indels
                                             4; Indels
Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                              Neuroblastoma-related oligonucleotide #74.
                                                               736 AGGACTTGGTAGGGTCCCAG 755
                                                                                     1 AGGACTTGGTAGCTTCTCGG 20
                                                                                                                                             BP
                    4.7%;
80.0%;
                                                                                                                                                                                                                                                                                                                                   30-MAY-2002; 2002WO-JP005294.
                                                                                                                                                                                                                                                                                                                                                         30-MAY-2001; 2001JP-00162775
                                                                                                                                           ABT32297 standard; DNA; 20
                                                                                                                                                                                        (first entry)
                   Query Match
Best Local Similarity 80.0
Matches 16; Conservative
                                                                                                                                                                                                                                                high malignancy
                                                                                                                                                                                                                                                                                        WO200297093-A1
                                                                                                                                                                                        08-MAY-2003
                                                                                                                                                                                                                                                                   Unidentified
                                                                                                                                                                                                                                                                                                              05-DEC-2002,
                                                                à
                                                                                   g
```

ö

Gaps

, 0

4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.9e+02; tive 0; Mismatches 4; Indels

CTCTTTTCTTCTCAAGAC 850

831

RESULT 175

CTCTTTACCTCTCAGAGGAC 20

The invention comprises DNA sequences that show enhanced expression in human neuroblastoma with good prognosis. The DNA sequences of the invention are useful in clarifying good/poor prognosis of neuroblastoma. The present DNA sequence was used in the exemplification of the invention Nucleic acids isolated from neuroblastoma showing enhanced expression in human neuroblastoma with good prognosis, useful in clarifying good/poor prognosis of neuroblastoma and providing genetic data. Example 5; Page 23; 444pp; Japanese WPI; 2003-167523/16. 

·.

```
Synthetic
                                                                                                                                                                                                                                                                                                   ADC39041;
                                                                                                                                                                                                                                                         RESULT 178
                                                                                                                                                                                                                                                                     ADC39041
                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                               ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid sequence encoding a polypeptide having desaturase activity, useful for useful for preventing or treating eczema, burned or dry skin, AIDS, multiple sclerosis, or inflammatory skin
                                                                                                                                                            human neuroblastomas with poor prognosis over those with a good prognosis. The nucleic acids of the invention are useful as a tool for distinguishing neuroblastomas with a favourable prognosis (spontaneous regression) from neuroblastomas with a poor prognosis (high malignancy). The DNA sequences ABT3224 — ABT32571 represent oligonucleotides used in
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Polyunsaturated fatty acid; PUFA; omega-3 desaturase; AIDS; cosmetic; delta-12 desaturase; acquired immune deficiency syndrome; gene therapy; inflammatory skin disorder; delta-17 desaturase; eczema; animal feed; multiple sclerosis; PCR; primer; ss.
                                                                                               Nucleic acids having higher expression in human neuroblastoma with poor prognosis for diagnostic prediction of neuroblastoma prognosis.
                                                                                                                                                   The invention comprises nucleic acids that show increased expression in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention is directed to the identification and isolation of novel genes that encode enzymes involved in the synthesis of polyunsaturated
                                                                                                                                                                                                                                                                                                                                                                                                                                           RO 1186 PCR primer used to isolate S. diclina omega-3 desaturase gene.
                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                          4.7%; Score 13.6; DB 1; Length 20; 80.0%; Pred. No. 3.9e+02;
                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                      Sequence 20 BP; 3 A; 4 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                Example 5; Page 26; 111pp; Japanese
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 4; Fig 9B; 137pp; English.
                                                                                                                                                                                                                                                                                                      736 AGGACTIGGIAGGGICCCAG 755
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Huang Y;
                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-JAN-2003; 2003WO-US001698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2002; 2002US-00060793.
  24-AUG-2001; 2001JP-00255226
                                                                                                                                                                                                                  example of the invention
                                                                                                                                                                                                                                                                                                                                                                               AAD58786 standard; DNA; 20
                      CHIBA PREFECTURE.
HISAMITSU PHARM CO
                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 80.0
Matches 16; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pereira
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-689526/65.
                                                                            WPI; 2003-140476/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Saprolegina diclina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ABBO ) ABBOTT LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003064596-A2
                                                       Nakagawara A;
                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mukerji P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          disorders
                                                                                                                                                                                                                                                                                                                                                                                                     AAD58786;
                       (CHIB-)
                                   (HISM)
                                                                                                                                                                                                                                                                                                                                                                      AAD58786/
                                                                                                                                                                                                                                                                                                                                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                   g
```

à

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Inhibiting corneal allograft rejection, by contacting an allograft with a formulation having an oligonucleotide targeted to intercellular adhesion molecule-1, extracellular adhesion molecule-1 or vascular cell adhesion
derived from the fungus Saprolegina diclina that encode omega-3 desaturases (also referred to as delta-17 desaturases) and delta-12 desaturases (also referred to as delta-17 desaturases) and delta-12 useful for preventides, composition and methods of the invention are useful for preventing or treating conditions caused by insufficient intake of at least one PUFA e.g. eczema, burned or dry skin, acquired immune deficiency syndrome (AIDS), multiple sclerosis or inflammatory skin disorders. Products produced in the method of the invention are useful in pharmaceutical and nutritional compositions, animal feeds and cosmetics. The invention is also useful in gene therapy. The present sequence is a PCR primer used to isolate omega-3 desaturase gene from Saprolegina diclina
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a method of inhibiting corneal allograft rejection, by contacting the allograft with a topical formulation comprising an antisense oligomuclectide targeted to intercellular adhesion molecule-1 (ICAM-1), extracellular adhesion molecule-1 (ICAM-1), or vascular cell adhesion molecule-1 (VCAM-1). The oligomuclectide is useful for inhibiting corneal allograft rejection or for preserving a corneal explant ex vivo, where the explant is human. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ss; primer; immunosuppressive; antisense therapy; corneal allograft rejection; intercellular adhesion molecule-1; ICAM-1; extracellular adhesion molecule-1; BLAM-1; vascular cell adhesion molecule-1; VCAM-1; corneal explant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        corneal explant ex vivo, where the explant is human. This s corresponds to one of the oligonucleotide of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 0 A; 8 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 4 A; 5 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 13.6; DB 1;
Pred. No. 3.9e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 14; SEQ ID NO 67; 106pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        949 GCAAGAAGAGCCAAATTGAC 968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          targeted primer #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20 gcacgargagccacrrrgac 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-OCT-2002; 2002WO-US033236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-OCT-2001; 2001US-00982262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADC39041 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ĊĶ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 80.00
Matches 16, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mirabelli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-403142/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003032920-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human VCAM-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 molecule-1.
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This is the nucleotide sequence of primer RSP95F1, an antisense primer designed for RT-PCR amplification of Rupestris stem pitting associated virus (RSPaV) dsRNA. It has been used with sense strand primer RSP95R1 (see AAV99301) in RT-PCR amplifications of dsRNA obtained from randomly selected grapwerines (vitis) and 15 grapevine accessions. Oligonucleotide primers (see AAV99294-307) capable of hybridising to a nucleic acid of RSPaV are claimed. They can be used in a method of detecting the presence of RSPaV, such as RSPaV-1 (see AAV99284), in a sample. The invention also provides methods of imparting resistance to RSPaV to plants, especially transgenic Vitis scion and rootstock cultivars
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Isolated proteins from Rupestris stem pitting-associated virus and related nucleic acid - vectors, host cells and transgenic Vitis cultivars
                                                                                                                                                                                                                                                                                                         RSPaV-1; grape; transgenic plant; disease resistance; PCR; primer; ss.
                                                   Gaps
                                                   ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.6%; Score 13.4; DB 1; Length 17; 93.3%; Pred. No. 3.4e+02; ve 0; Mismatches 1; Indels
                    Length 20;
                                                 4; Indels
                                                                                                                                                                                                                                                                                                                                                       Grapevine rupestris stem pitting associated virus.
                 Score 13.6; DB 1;
Pred. No. 3.9e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 1 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                              RSPaV antisense strand PCR primer RSP95F1.
                                                                              844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 60; Page 67; 163pp; English
                                                                                                       1 Crerercrearcreer 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    that are resistant to the virus.
                                                                            CTGTGTCTCTTTTCTTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CORR ) CORNELL RES FOUND INC.
                   4.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-0047147P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    98WO-US010391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93.3%;
                                                                                                                                                                                    AAV99300 standard; DNA; 17
                                                                                                                                                                                                                                                 26-APR-1999 (first entry)
                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Meng B;
Query Match
Best Local Similarity
Thes 16; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-045297/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
Les 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gonsalves D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                      WO9852964-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                    26-NOV-1998
                                                                            825
                                                                                                                                                                                                                   AAV99300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                      AAV99300
                                                                                                         셤
                                                                                                                                                                                                    ò
```

```
SNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A method has been developed for detecting the presence or absence of a single nucleotide polymorphism (SNP) allele in a genomic sample. The method comprises preparing a reduced complexity genome (RCG) from the genomic sample and analysing the RCG for the presence or absence of a sallele. The method can be used to characterise a tumour, to generate a genomic pattern for an individual genome or to generate a genomic classification code for a genome. The method can be used to assess whether a subject is at risk for developing a disease or to identify a set of SNP alleles associated with a disease. The method can also be us to perform linkage analysis. AAA35944 to AAA35947 represent sequences used in the exemplification of the present invention. AAA35948 to AAA36532 represent nucleotide sequences containing SNPs
                                                                                                                                                                                                                                                                                                                                                                                                                               preparation
                                                                              Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis; allels specific oligonucleotide; ASO; reduced complexity genome; RCG; genomic classification; identification; DNA fingerprinting; tumour characterisation; hybridisation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  checkpoint kinase-1; Chkl; antisense; ribozyme; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                           and analysis of reduced complexity genomes, useful for genotyping, fingerprinting and determining allele frequency of SNPs.
                                               Human genomic SNP allele specific oligonucleotide SEQ ID NO:493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.6%; Score 13.4; DB 1; Length 17; 93.3%; Pred. No. 3.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          Detection of single nucleotide polymorphisms in genomes by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                             Charest A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human Chkl ribozyme substrate SEQ ID NO: 1233.
                                                                                                                                                                                                                                                                                                                           (MASI ) MASSACHUSETTS INST TECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 67; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                             Housman DE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAH95808 standard; RNA; 17 BP
                                                                                                                                                                                                                                                              99WO-US022283
                                                                                                                                                                                                                                                                                            98US-0101757P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     766 CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    93.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTCCGCTTCTGAGG 2
               26-JUL-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA cleavage; cancer; ss
                                                                                                                                                                                                                                                                                                                                                             Jordan B,
                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-293181/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                             WO200018960-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200157206-A2
                                                                                                                                                                                                                                                              24-SEP-1999;
                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                            25-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                              06-APR-2000.
                                                                                                                                                                                                                                                                                                                                                           Landers JE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAH95808;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAH95808,
⋧
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
```

·:

ö

Gaps

; 0

776

762 TAGGCCTCCACTTCT Conservative

> ð g

Matches

AAA36427 standard; DNA; 17 BP

RESULT 180

AAA36427

AAA36427

Mon Jul 12 11:21:14 2004

```
WPI; 2002-684061/74
                                                                                                                                                                                                                                                                                                                                                                 RESULT 183
                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                         0
                                                                                                                                                                      The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (ChkI) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by ChkI levels, including cancer. The present sequence is an oligonucleotide described in the exemplification of the invention
                                                                                                                 Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                              Human, POSHL 1; SH3 domain, POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                     4.6%; Score 13.4; DB 1; Length 17; 93.3%; Pred. No. 3.4e+02; Live 0; Mismatches 1; Indels
                                                                                Holman PS;
                                                                                                                                                                                                                                                                                                                                                                                                             Human POSHL1 scanning oligonucleotide SEQ ID NO 1118.
                                                                                Booher RN,
                                                                                                                                                                                                                                       Sequence 17 BP; 3 A; 1 C; 7 G; 0 T; 6 U; 0 Other;
                                                                                 Mcswiggen J,
                                                                                                                                                       Claim 4; Page 89; 115pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US000667.
2001WO-US000668.
2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001US-0328205F.
2001US-0328205F.
                                                                                                                                                                                                                                                                                                                                                         ABV90405 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US000665.
2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-JAN-2002; 2002EP-00001165
                                                                                                                                                                                                                                                                                            798 AAGAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US000664
                   02-FEB-2001; 2001WO-US003504
                                     03-FEB-2000; 2000US-0179983P
                                                                                                                                                                                                                                                                                                            AAAAGCTCTCCTCCA 2
                                                      RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                         14; Conservative
                                                                                 Fattaey AR, Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (AEOM-) AEOMICA INC
                                                               FATT/) FATTAEY A R.
                                                                                                  WPI; 2001-496922/54.
                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
23-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                            23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-SEP-2002
 09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shannon M;
                                                                                                                                                                                                                                                                                                             16
                                                                                                                                                                                                                                                                                                                                                                          ABV90405;
                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                         RESULT 182
                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                ABV90405
 ð
```

```
·,
                                                                                                                                                                                                                                                                                                                                                                                                       Human POSHL 1 is a proto-oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnosing and treating caused by altered expression of human POSHL1 including diagnosing and useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic ono-human animals capable of producing the proteins. The present sequence is that of a scamming oligomucleotide useful in examples of the invention. Note: The present sequence did not form part of the prince printed specification, but is based on sequence information supplied to
Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABB83999), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids.
                                                                                                                                                                                                                             The invention relates to an isolated SH3 domain (POSH)-like signalling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human, POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine; gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.6%; Score 13.4; DB 1; Length 17; 93.3%; Pred. No. 3.4e+02;
                                                                                                                                                       Example 2; SEQ ID NO 1118; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human POSHL1 scanning oligonucleotide SEQ ID NO 1114.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 3 A; 5 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2010WO-US000665.
30-JAN-2001; 2010WO-US000666.
30-JAN-2001; 2010WO-US000667.
30-JAN-2001; 2010WO-US000668.
30-JAN-2001; 2010WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV90401 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001US-00864761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-JAN-2002; 2002EP-00001165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001US-0328205P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           746 AGGGTCCCAGGGTCC 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 Accecccaccinc 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-MAY-2001;
10-0CT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-SEP-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABV90401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
```

(AEOM-) AEOMICA INC.

```
GTAGGGCCCCAGGGT 17
   WPI; 2002-684061/74.
 Shannon M
                                   à
                                a
```

The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL, 1) polypeptide (I), comprising a sequence of 730 amino acids (SL4, ABBB399), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful of for identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnosing and treating cancer, they useful in the development of vaccines and (II) is useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomucleotide useful in examples of the invention. Note: The present sequence did not form part of the privant by the European Patent Office ö Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1. Gaps . 0 Example 2; SEQ ID NO 1114; 60pp + Sequence Listing; English Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;

Query Match 4.6%; Score 13.4; DB 1; Length 17; Best Local Similarity 93.3%; Pred. No. 3.4e+02; Matches 14; Conservative 0; Mismatches 1; Indels 744 GIAGGICCCAGGGT 758

Tumour suppression/reversion associated nucleotide #4106. ADB43783 standard; DNA; 17 BP. (revised)
(first entry) 18-DEC-2003 04-DEC-2003 ADB43783;

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens.

WO2003040369-A2. L5-MAY-2003 17-SEP-2002; 2002WO-IB004219. 17-SEP-2001; 2001FR-00011981. (MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M; Felerman A, Amson R,

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and calls containing the vectors), the encoded polypeptides and antibodies of viral infections or diseases characterized by development of tumours or viral infections or diseases characterized by development of tumours and/or prognosis of these diseases. The nucleotides can be used for diagnosis also be used to screen for their specific interactive molecules, and/or prognosis of these diseases. The nucleotides and polypeptides can be used to screen for their specific interactive molecules, and/or prognosis of the expression of the nucleotides and polypeptides can be used to screen for their specific interactive molecules, and/or prognosis of the expression of the nucleotides and polypeptides can be used to screen for their specific interactive molecules, and/or prognosis of the expression of prognosis and polypeptides can be used to screen for their specific interactive molecules, and/or prognosis of the molecules and polypeptides can be used to screen for their specific interactive molecules.
                                                                                                                                 New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 512; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    expression of the nucleotides.
WPI; 2003-441574/41.
```

Gaps ; 0 4.6%; Score 13.4; DB 1; Length 17; 93.3%; Pred. No. 3.4e+02; ive 0; Mismatches 1; Indels 846 Query Match Best Local Similarity 93.3% 832 TCTTTTCTTCTGA

Sequence 17 BP; 10 A; 1 C; 4 G; 2 T; 0 U; 0 Other;

ö

17 rarrrrrrrrrrrra 3 g à

RESULT 185 AAT08673/

Primer P53-3X5SEQ for p53 gene exon 5 sequencing. AAT08673 standard; DNA; 18 BP. 05-SEP-1996 (first entry) AAT08673;

primer, PCR, polymerase chain reaction, hierarchy, immunoassay, quantitative assay, fragment length, DNA sequencing; p53; mutation; ss.

Synthetic.

WO9601909-A1 25-JAN-1996.

95WO-US008605. 95US-00388381. 94US-00271946 7-JUL-1995; 08-JUL-1994; 14-FEB-1995; 

Stevens JK; Dunn JM, Diamandis E,

(VISI-) VISIBLE GENETICS INC.

WPI; 1996-097638/10.

Testing for disease-associated p53 gene mutation(s) using a hierarchy of assay techniques - e.g. immunoassay, DNA amplification and DNA sequencing.

```
Claim 11; Page 26; 44pp; English.
```

in a hierarchy of increasing accuracy and cost per tool, in which each tool detects essentially no false positives. Tests that may be employed, in order of increasing accuracy and cost per tool, in which each in order of increasing accuracy and cost are: (a) immunoassays, (b) DNA fragment length/quantity analysis, and (c) DNA sequencing of regions most likely to harbour point mutations. AAT08667-85 are primers used in DNA sequencing analysis. The primers are generally nested inside the amplification primers (AAT08645-66), i.e. closer to the exon, although in some cases the preferred sequencing primer is in fact the amplification primer. The sequencing primer is only gated to a fluorescent mol. such as fluorescent mol. such as fluorescent in a conjugated to a fluorescent mol. such as the present sequence is used to effective diagnosis of disease-associated mutations in the sequence the antisense strand of exon 5 Rapid and cost

Sequence 18 BP; 3 A; 6 C; 7 G; 2 T; 0 U; 0 Other;

0; 4.6%; Score 13.4; DB 1; Length 18; 93.3%; Pred. No. 3.7e+02; Indels 1; Mismatches .;0 751 CCCAGGGTCCCTAGG 765 14; Conservative Local Similarity Query Match Matches à 셤

CCCAGGGTCCCCAGG 1 15

RESULT 186

AAV30210 standard; DNA; 18 BP AAV30210; 

Caenorhabditis elegans primer SHP59. (first entry) 11-SEP-1998

clk-1 protein; developmental rate; longevity; cellular physiology; cellular metabolism; cancer; PCR; primer; amplification; ss.

Synthetic. Caenorhabditis elegans.

WO9817823-A1

30-APR-1998

17-OCT-1997;

96US-0028977P 96US-0033196P 18-DEC-1996; 21-OCT-1996;

97WO-CA000768

(UYMC-) UNIV MCGILL.

Hekimi S, Ewbank J,

WPI; 1998-261516/23.

m,

Lakowski

Barnes T,

clk-1 gene - used to obtain human clk-1 cancer diagnosis. New Caenorhabditis elegans clk-1 sequence, useful for, e.g. cance

Disclosure; Page 15; 46pp; English.

SHP59 in a nested PCR reaction to amplify the Caenorhabditis elegans clk-1 cDNA. The invention provides the C. elegans clk-1 protein (AAMS6670) which is involved in the developmental rate and longevity at the cellular physicalogy level, where clk-1 mutants have a longer life and altered cellular metabolism relative to wild-type. The clk-1 gene may be cloned to identify related genes, for e.g the human clk-1 sequence can be identified and may be useful in the diagnosis and/or prognosis of cancer. The invention claims that downregulation of expression of clk-1 can be Primer SHP57 (AAV30208) was used with primer SHP58 (AAV30209) and primer

claims that if downregulation clk-1 expression could be targeted to a particular tissue or organ, it could lead to a specific physiological slowing down of this tissue/organ and a concomitant slower rate of degradation by the ageing process. Alternatively, administration of an agent to promote tissue or organ-specific overexpression of clk-1 could allow the physiological rates of tissues or organs to be increased, to treat pathological conditions causing a slowdown of physiological rate of tissues/organs in a patient The invention also increase the life span of animals or humans. 5555555555<del>%</del>8

G; 1 T; 0 U; 0 Other; Sequence 18 BP; 9 A; 2 C; 6

ò Gaps 0 Score 13.4; DB 1; Length 18; Pred. No. 3.7e+02; 0; Mismatches 1; Indels Query Match
Best Local Similarity 93.3%;
Matches 14; Conservative

827 GIGICICITITICITC 841 GIGICCCITITCITC 18 g ò

RESULT 187 AAA5557

0

Gaps

BP. AAA55574 standard; DNA; 18

AAA55574;

(first entry) 30-AUG-2000

TRAF3 antisense oligonucleotide ISIS# 26792.

Tumour necrosis factor receptor-associated factor; TRAF; human; antisense oligomuclectide; phosphorothioate; antiproliferative; anti-inflammatory; E-selectin; jun kinase; ss.

Synthetic.

WO200020435-A1.

13-APR-2000.

99WO-US023171. 05-OCT-1999;

98US-00167109 06-OCT-1998;

(ISIS-) ISIS PHARM INC

Monia BP, Cowsert LM, Baker BF,

Xu XS;

WPI; 2000-303732/26

Antisense oligonucleotides targeted to nucleic acids encoding human tumor necrosis factor receptor-associated factor (TRAF), useful for treating diseases associated with TRAF expression such as inflammatory diseases.

Example 17; Page 56; 170pp; English

administering an antisense oligonucleotide. The reduction of jun kinase activation in cells comprises contacting the cells with an antisense oligonucleotide targeted to TRAF-6. A method for the reduction of E-selectin expression in cells or tissues comprises contacting the cells or tissues with an antisense oligonucleotide targeted to TRAF-2 or TRAF-6. The antisense oligonucleotides have antiproliferative and anti-inflammatory activity and are useful for treating disorders associated The present invention relates to antisense oligonucleotides (see AAA55496
-A55757) which are targeted to nucleic acids encoding a human tumour
necrosis factor receptor-associated factor (TRAF). The antisense
sequences comprise at least one modified internucleotide linkage, which
is a phosphorothioate linkage. The oligonucleotides also include at least
one modified sugar moiety such as a 2'-O-methoxyethyl sugar moiety.
Sequences AAA55490-A55495 represent nucleotide sequences encoding human
TRAFI-6. Included in the invention is a method for treating a human
having a disease associated with the expression of TRAF comprising

pharmacokinetic assay; pharmacodynamic assay; toxicology; serum albumin; alpha-acidic glycoprotein; CYP; multidrug resistance protein; MRP; uridine diphosphoglucuronosyl transferase; UGT; cytochrome P450.

WO200283897-A1

Mus sp.

Human, ss; transgenic; drug metabolism; behaviour; PCR; primer; mouse; pharmacokinetic assay; pharmacodynamic assay; toxicology; serum albumi

Mouse alpha-1-acid glycoprotein PCR primer AGP12F.

(first entry)

25-APR-2003

ABX77193;

BP

ABX77193 standard; DNA; 19

RESULT 189 ABX77193/c

```
0
with cell proliferation and inflammation. The antisense oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                expression of ethylene-inducible genes in plants, having DNA binding activity specific to the consensus sequence A(T/C)G(A/T)A(C/T)CT. The present invention describes the tobacco ethylene insensitive 3 BEN3)-like protein, designated TELL, isolated from Nicotiana tabacum cv Samsun NN. The transcription factor is used to impart environmental stress transcription factor, and screening potential inhibitors of the expression of ethylene-inducible genes in plants. AAS95383 to AAS95476 represent oligonucleotides used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                        Tobacco, ethylene insensitive 3; TEIL; transcription factor; plant; regulation; ethylene inducible gene; environmental stress; resistance;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes a transcription factor regulating the
                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Transcription factor regulating the expression of ethylene-inducible
                may also be used as a diagnostic probe for studying gene function
                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genes and gene encoding it, useful for imparting resistance to environmental stress to plants.
                                                                                  Length 18;
                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                           TEIL random binding site selection oligonucleotide #55.
                                               Sequence 18 BP; 4 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 3 A; 2 C; 7 G; 6 T; 0 U; 0 Other;
                                                                               Score 13.4; DB 1;
Pred. No. 3.7e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (NORQ ) NAT INST AGROBIOLOGICAL RESOURCES MIN. (NISC-) JAPAN SCI & TECHNOLOGY CORP.
                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 3; Fig 5; 65pp; Japanese.
                                                                                                                                                                                                                                                            AAZ95437 standard; cDNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-JP002347.
                                                                               Query Match
Best Local Similarity 93.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98JP-00227448
                                                                                                                                               770 CACTICIGAGGGCAG 784
                                                                                                                                                                              1 cácrrereadedecad 15
                                                                                                                                                                                                                                                                                                                           01-JUN-2000 (first entry)
                                                                                                               14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ohashi Y, Kosugi S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-206011/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nicotiana tabacum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200009712-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-FEB-2000
                                                                                                                                                                                                                                                                                              AAZ95437;
                                                                                                                                                                                                                               RESULT 188
                                                                                                               Matches
                                                                                                                                                                                                                                             SSXS
                                                                                                                                               ð
                                                                                                                                                                            g
```

```
This invention relates to a transgenic non-human animal which may be used for assessing the behaviour and/or metabolism of a drug in another animal and which expresses a foreign polypeptide associated with drug behaviour and/or metabolism. The invention also comprises a nucleic acid construct for use in producing the above transgenic non-human animal and a method of assessing the metabolism and/or behavior of a drug in an animal of interest, comprising administering a test agent to the transgenic animal and conducting analytical tests to determine drug metabolism and/or behaviour. The transgenic animal is useful in studying drug metabolism and/or behaviour in other animals. The nucleic acid construct is useful in producing the above transgenic animal and the methods are used for producing, breeding and using transgenic animals for pharmacological (e.g. pharmacokinetic or pharmacodynamic assays) and/or toxicological studies. Nucleic acid sequences used within the invention are serum and the control of the contro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New transgenic non-human animal expressing a foreign polypeptide associated with drug behavior and/or metabolism, useful for studying the behavior and/or metabolism of a drug in other animals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               albumin, alpha-acidic glycoprotein, cytochrome P450 (CYP); uridine diphosphoglucuronosyl transferase (UGT); multidrug resistance proteins and (MRP's). The present sequence represents a PCR primer used to create
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.6%; Score 13.4; DB 1; Length 19; 93.3%; Pred. No. 4e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a transgenic animal within the scope of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 7 A; 1 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 2A; Page 54; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-APR-2001; 2001AU-00004467.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ01462 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-APR-2002; 2002WO-AU000485.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GENE-) GENE STREAM PTY LID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     894 CTTCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     93.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTICICACCTICIGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-093021/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ01462;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Daly JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ01462
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SX B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

;

Gaps

; 0

Score 13.4; DB 1; Length 18; Pred. No. 3.7e+02; 0; Mismatches 1; Indels

.,

14; Conservative

Local Similarity

Best Loca Matches

Query Match

720 GAGTGACTCTGGTCA 734

à 염

GAGTGAGTCTGGTCA 18

4.6%;

07-0CT-1999

10-JUN-1999

Synthetic

17-DEC-1997

Griffais R;

```
PCR primers AAZ01426-Z06209 were used to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (see AAZ01425). These ORFs encode polypeptides (see AAY36754-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal uretritis, epidymitis, cervicitis, salpingitis, perihepatitis, bartholinitis, pheumopathy in breast feeding infants; and venereal lymphogramulomatosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human biallelic marker upstream amplification primer SEQ ID NO:4532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human genome; biallelic marker; high density diseguilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1. 4.6%; Score 13.4; DB 1; Length 20; Similarity 93.3%; Pred. No. 4.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                              Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 1810; 1755pp; English.
                                                                                                                                                               97FR-00015041.
97FR-00016034.
98US-0107077P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0082614P.
98US-0109732P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-IB000822
                                                                                                                         98WO-IB001939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGAGCTCTTCTCCA 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ70176 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                         WPI; 1999-371125/31.
                                                                                                                                                                                                                                                   (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-APR-1998;
23-NOV-1998;
                                       W09928475-A2
                                                                                                                         27-NOV-1998;
                                                                                                                                                                                       17-DEC-1997;
                                                                                                                                                                                                           04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-SEP-2001
                                                                                                                                                                   28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-OCT-1999,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14;
                                                                               10-JUN-1999
                                                                                                                                                                                                                                                                                             Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ70176;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ70176,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primers AA201426-Z06209 were used to amplify open reading frames (ORFS) of the genome of Chlamydia trachomatis (see AA201425). These ORFs encode polypeptides (see AAY3674-Y3749) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases, e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion conjunctivitis; genital diseases such as nongonococcal uretritis, epidymitis, cervicitis, salpingitis, prihepatitis, bartholinitis; promeumopathy in breast feeding infants; and venereal lymphogramulomatosis. The polypeptides of the invention may be of use in treating these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vaccine; eye disease; conventional trachoma; nonendemic trachoma;
paratrachoma; inclusion conjunctivits; genital disease; perihepatitis;
nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer;
bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
                                                                                                   Vaccine; eye disease; conventional trachoma; nonendemic trachoma; paratrachoma; inclusion conjunctivitis; genital disease; perihepatitis; nongonococcal uretritis; epidymitis; cervicitis; salpingitis; PCR primer; bartholinitis; pneumopathy; venereal lymphogranulomatosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.6%; Score 13.4; DB 1; Length 20; 33.3%; Pred. No. 4.2e+02; Ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR primer used to amplify an ORF of Chlamydia trachomatis.
                                                           PCR primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 3 A; 9 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 1444; 1755pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                     97FR-00015041.
97FR-00016034.
98US-0107077P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             804 TCTCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                               98WO-IB001939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rerecreedacreed 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ05919 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-OCT-1999 (first entry)
                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 4.6
Best Local Similarity 93.3
Matches 14; Conservative
                                                                                                                                                                                                                                     Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-371125/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                               27-NOV-1998;
                                                                                                                                                                                                                                                                               WO9928475-A2
                                                                                                                                                                                                                                                                                                                                                                                                         28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                               04-NOV-1998;
```

0

Gaps

0;

1; Indels

0; Mismatches

BP.

Synthetic

AAZ05919;

9

à g RESULT 191 AAZ05919

Chumakov I;

Blumenfeld M,

(GEST ) GENSET

```
29-NOV-1999;
15-FEB-2000;
                                                                                                   23-APR-1999;
                                                                                                  19-FEB-1999;
                                                                                                     17-AUG-1999;
  Cohen D,
                                                                   AAA93148;
                                                                                 probe;
                                                             RESULT 193
                                                              AAA93148,
ag
                                                     Š
```

invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the Novel biallelic markers used to construct a high density disequilibrium AAZ65654 to AAZ69578 represent human biallelic markers from the present Sequence 20 BP; 11 A; 3 C; 5 G; 1 T; 0 U; 0 Other; Claim 8; Page 1197; 2745pp; English map of the human genome WPI; 2000-013267/01 present invention

·; Gaps 0; Score 13.4; DB 1; Length 20; Pred. No. 4.2e+02; 0; Mismatches 1; Indels ;0 4.68; Query Match Best Local Similarity 93.3' Watches 14; Conservative

AAA93148 standard; DNA; 20 BP

(first entry) 12-JAN-2001

Clone vg11_1 secreted protein coding sequence probe SEQ ID NO: 79.

Human secreted protein; cytokine; cell proliferation; nutritional supplement; immune modulation; autoimmune disorder; haematopoiesis regulation; tissue growth; haemostasis; inflammation;

Homo sapiens

WO200049134-A1

24-AUG-2000

18-FEB-2000; 2000WO-US004340. 99US-0120680P

990S-00298733. 990S-0149639P-990S-0157247P-990S-0167822P-990S-0167822P-990S-0167823P-23-SEP-1999; 01-OCT-1999; 29-NOV-1999;

(ALPH-) ALPHAGENE INC

Rapiejko P; Hall J, Hoffman H, Valenzuela D, Yuan O,

WPI; 2000-549267/50.

derived from Homosapiens, useful for therapy, diagnosis, and research, as well as nutritional sources or supplements. New secreted proteins and polynucleotides encoding them, which are

Disclosure, Page 293; 309pp; English

their coding sequences isolated from various human cDNA libraries. The probes shown in the specification (AAA91132-A93156) can be used to obtain the cloned sequences from bacterial cells. The proteins and coding sequences can be used in the isolation of similar genes and proteins, the elucidation of their function in vivo, and to treat a number of conditions. It is possible that they may have uses as mutritional supplements, as cytokine or cell proliferation factors, in immune modulation, where they may be used to treat immune and autoimmune diseases, as haematopoiesis regulators (treating myeloid or lymphoid cell deficiencies), in the promotion of tissue growth, they may have chemokine or chemotatic activity, haemostatic or thrombolytic activity, or antiproteins secreted present invention is concerned with a number of inflammatory activity

Sequence 20 BP; 7 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Gaps ; 0 4.6%; Score 13.4; DB 1; Length 20; 93.3%; Pred. No. 4.2e+02; ive 0; Mismatches 1; Indels Query Match
Best Local Similarity 93.3
Matches 14; Conservative

ö

736 722 GTGACTCTGGTCATA 18 Grécercrégada

à g RESULT 194 AAA783. AAA78311 standard; DNA; 20

BP

AAA78311;

16-NOV-2000 (first entry)

Human Ig L chain sequencing primer SHKF-11.

Antirheumatic agent, immunoglobulin M, IgM; apoptosis inducer, immunosuppression; autoimmune disease; treatment; rheumatism; anti-Fas antibody; primer; ss

Homo sapiens

JP2000154149-A.

99JP-00263984. 17-SEP-1999;

06-JUN-2000.

98JP-00264598. 18-SEP-1998;

(SANY ) SANKYO CO LID.

WPI; 2000-454476/40

Anti-human Fas humanizing antibody-containing antirheumatic agents. 

Example 4; Page 21; 109pp; Japanese.

The present invention relates to antirheumatic agents which comprise as active ingredients an immunoglobulin M (IgM) protein. The IgM protein does not include a J segment, has apoptosis inducing activity, and consists of a light and heavy chain polypeptide produced synthetically. The agents of the invention exhibit antirheumatic and immunosuppressive activity and can be used to treat autoimmune diseases, especially rheumatism. The IgM molecule used in the invention has human Fas-antigen

```
the IgM light and heavy chains (see AAA78267-A78272) and the corresponding protein sequences (see AAB12913-B12918 and AAB12919), and nucleotide sequences of the humanised anti-human Fas 1g CH11 (see AAA78202-A78206) and protein sequences (see AAB12908-B12910). Also included are anti-human Fas antibody CDR peptides (AAB12902-B12907). Primers specific for the anti-human Fas antibody, light, heavy and kappa chains used in the invention are represented by sequences AAA78213-A7826. Primers used for sequencing the human Ig DNA used in the invention are represented by sequences AAA78277-A78318 and AAA78335-A78337, while humanised anti-Fas Ig DNA sequencing primers are represented by sequences AAA78211-A78318 and AAA78338-A78367. Primer represented by sequences ABA78211-A78318 and AAA78338-A78367. Primer represented by sequences ABA78211-A78318 and AAA78338-A78367. Primer broduction of the agent of the invention
                                                                                                                                                                                                                                                                                                                                                                               o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel compound for diagnosing, preventing and treating immune disorders, comprising an oligonucleotide that specifically hybridizes with a nucleic acid sequence encoding B7 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention provides sequences of antisense oligonucleotides trargeted at the murine and human B7-1 and B7-2 coding and mRNA sequences. The antisense sequences have phosphorothicate backbones and some nucleotides are 2'-methoxyethoxy residues. The sequences can be used in the treatment of inflammatory and autoimmune disorders, including asthma; juvenile diabetes mellitus, myasthenia gravis, Graves' disease, rheumatoid arthritis, allograft rejection, inflammatory bowel disease,
properties. Included in the invention are nucleotide sequences of
                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            multiple sclerosis, psoriasis, systemic lupus erythematosus, contact dermatitis, rhinitis, allergies and cancer
                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation; autoimmune disorder; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                            4.6%; Score 13.4; DB 1; Length 20; 93.3%; Pred. No. 4.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human B7-1 antisense oligonucleotide SEQ ID NO: 126
                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 5 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Karras JG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 12; Page 75; 162pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAY-2000; 2000WO-US014471.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00326186
                                                                                                                                                                                                                                                                                                                                                                                                                            710 AGTCCCAGGAGAGTG 724
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTCCCAGGAGAGTG 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAF32929 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                    Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vickers TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-049991/06.
                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200074687-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF32929;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9
                                                                                                                                                                                                                                                                                                                                              Query Match
  binding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;

```
·.
                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      is believed to be a negative regulator of the E2F transcription factor. The antisense oligomucleotides of the invention are used to treat a person suspected of having or being prone to a disease or condition a human DDB2/p48 expression. The present DNA sequence represents a human DDB2/p48 antisense oligomucleotide of the invention. NOTE: The present DNA sequence is a 2'-0-methoxyethyl gapmer and contains a phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Antisense oligonucleotide which specifically hybridizes with a region of a nucleic acid encoding human Damage-specific DNA binding protein p48, useful for treating diseases and conditions associated with p48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention comprises antisense oligonucleotides targeted to the human damage specific DNA binding protein 2 (DDB2 - also known as p48) gene, located on chromosome 11. DDB2 is a subunit of the the DDB protein which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                     Human; ss; antisense oligonucleotide; antisense therapy; PCR; primer; damage specific DNA binding protein 2; DDB2; p48; chromosome 11; DDB; E2F transcription factor; p48 expression-related disease; DDB2 expression-related disease;
                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                               ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 20;
 Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.6%; Score 13.4; DB 1;
93.3%; Pred. No. 4.2e+02;
iive 0; Mismatches 1;
Score 13.4; DB 1;
Pred. No. 4.2e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                            Human DDB2 antisense oligonucleotide 26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 3; Col 45-46; 36pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-DEC-2000; 2000US-00732199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-DEC-2000; 2000US-00732199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          869
4.6%;
                                                             779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABL4404
ID ABL44404 standard; DNA; 20
                                                                                           GACTCCACTTCTGAG 16
                                                                                                                                                                     20
                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                     phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 93.3
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          855 TCCTGGCTCCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rccreecrccagare
                                 14; Conservative
                                                               765 GCCTCCACTTCTGAG
                                                                                                                                                                     AAL43527 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-424788/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Popoff I, Wyatt J;
                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                 US6379960-B1.
                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                               02-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                              30-APR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         expression
   Query Match
Best Local S
Matches 14
                                                                                                                                                                                                   AAL43527;
                                                                                           N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 197
                                                                                                                                         RESULT 196
                                                                                                                                                       AAL43527
                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                ð
                                                                                           q
```

```
The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal orresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates of the marker is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. to array the multiwell and altered directions; (f) the mixed clones are cultured and the resultant cultures are amplified products; (h) the clones in the multiwell plates are specified from the amplified products; (h) the clones in the multiwell plates are specified from the amplified products; (h) the clones in the multiwell plates are specified from the amplified products; (h) the clones in the multiwell plates are specified from the amplified products; (h) the clones in the multiwell plates are specified from the amplified products; (h) the clones in the multiwell mixed reconstituted as the positions on the chromosome and arrayed. The clones are mixed for the maximum and arrayed. The mixed mixed for the maximum and arrayed the positions on the chromosome and arrayed. The more array is useful for gene analysis. NaMayassa to a plate and arrayed the more arrayed the more arrayed the more arrayed.
                                                                                                                                                    Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; inhibitor of DNA binding-1; Id-1; cytostatic; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primers for human chromosome 1936-35 DNA, and ABLA represent PCR primers for human chromosome 21q22.1, wherefically claimed for use in the present invention
                                                                                                          Human chromosome 1p36-35 PCR primer SEQ ID NO:1448.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 2 A; 4 C; 6 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; Page 33; 528pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ВР
                                                                                                                                                                                                                                                                                                                                                    12-MAR-2001; 2001JP-00068285.
                                                                                                                                                                                                                                                                                                                                                                                                  10-MAR-2000; 2000JP-00066716
                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIKA ) RIKAGAKU KENKYUSHO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAS16656 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 93.3
les 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            821 TTGGCTGTGTCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Arraying genome clones.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-144136/19.
                                                                                                                                                                           PCR primer; ss.
                                                                                                                                                                                                                                                              JP2001321190-A.
                                                                                                                                                                                                                       Homo sapiens
                                                              11-APR-2002
                                                                                                                                                                                                                                                                                                            20-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAS16656;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAS16656/c
#XEXEXEX
```

Gaps . 0 4.6%; Score 13.4; DB 1; Length 20; 33.3%; Pred. No. 4.2e+02; ve 0; Mismatches 1; Indels 93.3%;

;

and ABL45323 to ABL45634

21q22.1, which are

835

Human Inhibitor of DNA binding-1, antisense oligonucleotide ISIS #124754.

immunosuppressive; antisense therapy; antisense oligonucleotide; byperproliferative disorder; immune disorder; muscular disorder; ss; vascular disorder; pancreatic disorder; infection; inflammation; tumour. hyperproliferative

Location/Qualifiers Key modified_base Synthetic

Homo sapiens

/mod_base= OTHER /note= "Phosphorothioate backbone. Also, all cytidine residues are 5-methyl cytidines" *tag=

/mod_base= OTHER /note= "2'-O-methoxyethyl (2'-MOE) nucleotides" *tag= nodified base

/mod_base= OTHER /note= "2'-0-methoxyethyl (2'-MOE) nucleotides" บ 16. .20 /*tag= modified base

WO200183513-A2

08-NOV-2001

25-APR-2001; 2001WO-US013209.

28-APR-2000; 2000US-00561497.

(ISIS-) ISIS PHARM INC

Baker BF, Bennett CF,

WPI; 2002-041477/05.

Novel antisense compound, specifically hybridizing to and inhibiting the expression of Inhibitor of DNA binding-1, useful for treating hyperproliferative, immune, muscular, vascular or pancreatic disorder.

Example 15; Page 82; 105pp; English.

The invention relates to novel antisense compounds (I) 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Inhibitor of DNA binding-1, where (I) specifically hybridises with and inhibitor of DNA binding-1. Antisense inhibition of human captression of Inhibitor of DNA binding-1. Antisense inhibition of human colliquous colliquous and a decay gap was tested. A series of oligonucleotides were designed to target different regions of the human Inhibitor of DNA binding-1 RNA. The compounds were analysed for their effect on human Inhibitor of DNA binding-1 RNA. The compounds were analysed for their effect on human Inhibitor of DNA binding-1 RNA. The compounds were analysed for their effect on human Inhibitor of DNA binding-1 RNA. The result showed that the oligonucleotides showed at least 25% inhibition of human Inhibitor of DNA binding-1 expression. (I) is useful for treating a human having of Inhibitor of DNA binding-1 in cells or tissues by contacting the cells or tissues with (I). (I) is also useful for treating a human having a disease or condition associated with corporphiactically effective amount of (I), where the disease or condition is a hyperproliferative disorder. (I) may also be used for diagnostics, therapeutics, prophylaxis (e.g., to prevent or dealay cinfection, inflammation or tumour formation), and as research reagents and kits. (I) may be safely and effectively administered to humans. The present sequence represents a human Inhibitor, the DNA binding-1, antisense or continued the continued of the oligonucleotide used in the method of the invention 

Sequence 20 BP; 8 A; 3 C; 8 G; 1 T; 0 U; 0 Other;

Gaps .; o Query Match

4.6%; Score 13.4; DB 1; Length 20;
Best Local Similarity 93.3%; Pred. No. 4.2e+02;
Matches 14; Conservative 0; Mismatches 1; Indels

ö

ò

The invention relates to novel antisense compounds (I) 8-30 nucleobases in length targeted to a nucleic acid molecule encoding Inhibitor of DNA binding-1, where (I) specifically hybridises with and inhibits the expression of Inhibitor of DNA binding-1. Antisense inhibition of human inhibitor of DNA binding-1 (2-mORE) wings and a deoxy gap or series of oligonucleotides having 2-methoxyethy1 (2-mORE) wings and a deoxy gap was tested. A series of oligonucleotides were designed to target different regions of the human Inhibitor of DNA binding-1 RNA. The compounds were analysed for their effect on human Inhibitor of DNA binding-1 RNA. The binding-1 mRNA levels by quantitative real-time polymerase chain reaction (PCR). The result showed that the oligonucleotides showed at least 25% inhibition of human Inhibitor of DNA binding-1 in cells or inhibition the expression of Inhibitor of DNA binding-1 in cells or tissues by contacting the cells or tissues with (I) is also useful for treating a human having a disease or condition associated with Novel antisense compound, specifically hybridizing to and inhibiting the expression of Inhibitor of DNA binding-1, useful for treating hyperproliferative, immune, muscular, vascular or pancreatic disorder. Human Inhibitor of DNA binding-1, antisense oligonucleotide ISIS #124755 Human; inhibitor of DNA binding-1; Id-1; cytostatic; antiinflammatory; immunosuppressive; antisense therapy; antisense oligonucleotide; hyperproliferative disorder; immune societ; mscular disorder; ss; vascular disorder; pancreatic disorder; infection; inflammation; tumour. /note= "Phosphorothioate backbone. Also, all cytidine /mod_base= OTHER /note= "2'-O-methoxyethyl (2'-MOE) nucleotides" 16..20 /note= "2'-0-methoxyethyl (2'-MOE) nucleotides" residues are 5-methyl cytidines" Example 15; Page 82; 105pp; English. Location/Qualifiers Wyatt JR; OTHER /mod_base= OTHER AAS16657 standard; DNA; 20 BP. 25-APR-2001; 2001WO-US013209 28-APR-2000; 2000US-00561497 829 GICTCTTTTCTTCTC 843 /mod base= (first entry) Д 15 Grerearireirer *tag= /*tag= Baker BF, Bennett CF, /*tag= (ISIS-) ISIS PHARM INC. 50 WPI; 2002-041477/05. WO200183513-A2 modified base modified base modified base Homo sapiens 14-FEB-2002 Synthetic. AAS16657; RESULT 19. AAS16657/0

ö Inhibitor of DNA binding-1 by administering a therapeutically or prophylactically effective amount of (1), where the disease or condition is a hyperproliferative disorder, immune disorder, muscular disorder, vascular disorder or pancreatic disorder. (1) may also be used for diagnostics, therapeutics, prophylaxis (e.g., to prevent or delay infection, inflammation or tumour formation), and as research reagents and kits. (1) may be safely and effectively administered to humans. The present sequence represents a human inhibitor of DNA binding-1, antisense oligonucleotide used in the method of the invention Human, antisense; lung dysfunction, nasal airway dysfunction; antiinflammatory; antiallergic; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds. Gaps 0; 4.6%; Score 13.4; DB 1; Length 20; 13.3%; Pred. No. 4.2e+02; ve 0; Mismatches 1; Indels Sequence 20 BP; 10 A; 3 C; 6 G; 1 T; 0 U; 0 Other; Human oligonucleotide sequence BP. 829 GTCTCTTTTCTTCTC 843 93.3%; ABZ93836 standard; DNA; 20 (first entry) 14; Conservative Grercarrerere Best Local Similarity WO200285308-A2 Homo sapiens 17-OCT-2003 31-OCT-2002. ABZ93836; 18 Query Match RESULT 200 Matches ABZ93836, 555555555<del>8</del>8 ð g

Aguilar D; Katz E, Pabalan J, Li Y, Sandrasagra A, Ka Tang L, Shahabuddin S; 23-APR-2002; 2002WO-US013135. 24-APR-2001; 2001US-0286137P. (EPIG-) EPIGENESIS PHARM INC Nyce JW, Miller S,

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or WPI; 2003-229219/22.

Disclosure; SEQ ID NO 9078; 872pp; English.

ubiquinone

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5 or 3 end genomic flanking regions, 5 and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or masal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition is useful for treating or use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also

\$\$\$\$\$\$\$\$\$\$\$\$\$\$

for enhancing the prophylactic or therapeutic respiratory effect of an antinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 20 BP; 7 A; 2 C; 4 G; 7 T; 0 U; 0 Other;

4.6%; Score 13.4; DB 1; Length 20; 93.3%; Pred. No. 4.2e+02; ative 0; Mismatches 1; Indels 934 TCCAGAGAATTTTAC 948 Conservative Query Match Best Local Similarity Matches 14; Conserv

rcragagarrirac 4 18 g

ABZ90892 standard; DNA; 20 BP

ABZ90892;

Human oligonucleotide sequence. 17-0CT-2003 (first entry)

Human; antisense; lung dysfunction; nasal airway dysfunction; antinflammatory steroid; ubiquinone; antinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; broncholation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2.

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC

Pabalan J, Aguilar Katz E, Li Y, Sandrasagra A, K Tang L, Shahabuddin S; Miller S, Ę, Nyce

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid ubiquinone

Disclosure; SEQ ID NO 6134; 872pp; English.

first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory, antiallergic, antiasthmatic, hypotensive, has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also The invention relates to a novel pharmaceutical composition, which has 

for enhancing the prophylactic or therapeutic respiratory effect of an autiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubliquinone or lung surfactant in a subject's tissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences 88888888888**%** 

Sequence 20 BP; 4 A; 3 C; 10 G; 3 T; 0 U; 0 Other;

Gaps ·. 4.6%; Score 13.4; DB 1; Length 20; 33.3%; Pred. No. 4.2e+02; 1; Indels 93.3%; Pred. .... 14; Conservative Local Similarity Query Match Best Loca Matches

0

à d

ö

Gaps

.; 0

RESULT 202 ABT21439/

ABT21439 standard; DNA; 20 BP.

ABT21439;

(first entry) 16-APR-2003

Multiplex group PCR primer #186.

Racing potential; horse; grandpaternal DNA; over-represented; breeding; grandmother; performance; progeny horse; PCR; primer; ss.

Unidentified.

WO200292851-A2.

21-NOV-2002.

15-MAY-2002; 2002WO-GB002273.

(ANIM-) ANIMAL HEALTH TRUST. (BRHO-) BRITISH HORSERACING BOARD. 15-MAY-2001; 2001GB-00011886.

Swinburne JE; Binns MM,

WPI; 2003-129314/12.

Determining the racing potential of a horse comprises measuring whether grandpaternal or grandmaternal DNA from the selected grandmother DNA is over-represented in the genome of the horse.

Example 2; Page 24; 49pp; English

The invention relates to a novel method for determining racing potential of a horse. The method comprises measuring: whether grandpaternal DNA is over-represented in the genome of the horse; or in the case where one of the grandmothers was selected for breeding on the basis of racing performance, whether grandmaternal DNA from the selected grandmother is over-represented in the genome of the horse which indicates that the horse has good racing potential. The method of the invention is useful for determining the racing potential of a horse or for obtaining a progeny horse with good racing potential. This polynucleotide sequence representation of DNA from male grandparents of the invention represents a PCR primer used in the detection method of over-

Sequence 20 BP; 7 A; 2 C; 8 G; 3 T; 0 U; 0 Other;

Length 20; 4.6%; Score 13.4; DB 1; 93.3%; Pred. No. 4.2e+02; Best Local Similarity Query Match

RESULT 203

g à

ABT33855

Matches

```
Cytostatic; methyl transferase inhibitor; DNA methyl transferase isoform; gene therapy; anti-DNA methyl transferase oligonucleotide; inhibitor; cell proliferation; neoplasia; human DNA MeTase DNMT 1; enzyme; ds.
                                                                       Cytostatic; methyl transferase inhibitor; DNA methyl transferase isoform; gene therapy; anti-DNA methyl transferase oligonucleotide; inhibitor; cell proliferation; neoplasia; human DNA MeTase DNMT 1; enzyme; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an agent that inhibits one or more specific DNA methyl transferase isoforms (but not all DNA methyl transferase isoforms), such as an anti-DNA methyl transferase oligonucleotide or a small molecule inhibitor of DNA methyl transferase. The agents, oligonucleotides, inhibitors and methods are useful for identifying specific inhibition of specific DNA methyl transferase isoforms involved in cell proliferation and/or differentiation, and thus providing a treatment for cell proliferative and/or differentiation, and thus providing a treatment for cell proliferative and/or differentiation disorders, e.g. neoplasia. This polymucleotide sequence represents a human DNA MeTase DNMT 1 oligo relating to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New inhibitors of DNA methyl transferase isoforms, e.g. anti-DNA methyl transferase oligonucleotides or small molecule inhibitors of DNA methyl transferase, useful for treating cell proliferative and differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 2 A; 5 C; 6 G; 3 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.6%; Score 13.4; DB 1;
86.7%; Pred. No. 4.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Mismatches
                                      Human DNA MeTase DNM3a oligo SEQ ID No 26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human DNA MeTase DNM3a oligo SEQ ID No 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 14; Page 23; 76pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                            11-MAY-2001; 2001US-0290202P.
                                                                                                                                                                                                                                                                                     13-MAY-2002; 2002WO-IB003120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGICCIGGCICCAGI 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTCGTGGCTCCAGU 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABT33829 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
29-MAY-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                          (METH-) METHYLGENE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-148369/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200291926-A2
                                                                                                                                                                                                        WO200291926-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                   Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-NOV-2002
                                                                                                                                                                                                                                            21-NOV-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Macleod AR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABT33829;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABT33829
엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BXBXSXAMMXBXBXGX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ó
    ö
                                                                                                                                                                                                                                                                                                                                                    Cytostatic; methyl transferase inhibitor; DNA methyl transferase isoform; gene therapy; anti-DNA methyl transferase oligonucleotide; inhibitor; cell proliferation; neoplasia; DNMT 3a; enzyme; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to an agent that inhibits one or more specific DNA methyl transferase isoforms (but not all DNA methyl transferase isoforms), such as an anti-DNA methyl transferase oligonucleotide or a small molecule inhibitor of DNA methyl transferase. The agents, oligonucleotides, inhibitors and methods are useful for identifying specific inhibition of specific DNA methyl transferase isoforms involved in cell proliferation and/or differentiation, and thus providing a treatment for cell proliferative and/or differentiation disorders, e.g. neoplasia. This polymuleotide sequence represents a DNMT3a oligo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New inhibitors of DNA methyl transferase isoforms, e.g. anti-DNA methyl transferase oligonucleotides or small molecule inhibitors of DNA methyl transferase, useful for treating cell proliferative and differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.6%; Score 13.4; DB 1; Length 20; 33.3%; Pred. No. 4.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
    ï
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequence relating to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure, Fig 4; 76pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABT33830 standard; DNA; 20 BP.
                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-MAY-2001; 2001US-0290202P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-MAY-2002; 2002WO-IB003120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            853 CGTCCTGGCTCCAGT 867
                                             774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               93.3%;
                                                                                                                                                                                           ABT33855 standard; DNA; 20
                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                 DNMT3a oligonucleotide #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14; Conservative
                                                                    18 CCTTGGCCTCCACTT
    Conservative
                                             760 CCTAGGCCTCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (METH-) METHYLGENE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-148369/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200291926-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                        Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-NOV-2002
                                                                                                                                                                                                                                                                          29-MAY-2003
      14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABT33830
                                                                                                                                                                                                                                  ABT33855;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Macleod
```

÷

Gaps

.; 0

Best Loc Matches

ð 엄 RESULT 204

ABT33830

田政を以

```
31-DEC-1996; 96US-00777266.
04-JUN-1999; 99US-00326186.
                                                                                                                                                                                                                                                      04-JUN-1999; 99US-00326186.
25-MAY-2000; 2000WO-US014471.
                                                                                                                                                                                                                                                                 (BENN/) BENNETT C F.
(VICK/) VICKERS T A.
(KARR/) KARRAS J G.
                                    WPI; 2003-148369/14.
                                                                                                                                                                                                                            US2003176374-A1.
                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                    18-SEP-2003
                             Macleod AR;
                                                                                                                                                                                                                Synthetic
                                                                                                                                                                        ADE27864;
                                                                                                                       Query Match
                                                                                                                                                         RESULT 206
                                                                                                                              Matches
à
                                                                                                                                             원
```

```
The invention relates to a method of treating an inflammatory skin disorder in an individual by topically applying an antisense compound targeted to a nucleic acid molecule encoding a human B7 protein. The invention is for treating an inflammatory skin disorder in individual. The skin disorder is psoriasis, contact dermatitis, atopic dermatitis, seborrheic dermatitis, nummular dermatitis, generalised exfoliative dermatitis or eczema. The invention effectively modulates critical costimulatory molecules such as the B7 protein. The present sequence represents a human B7-1 targeted oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, PTEN, MMAC1, TEP1, phosphorothicate; antisense oligonuclectide; inhibition; protein phosphatase; tumour; diagnosis; inflammation; anticancer; anti-inflammatory; anti-infective; infection; ss.
                                                                   topically applying an antisense compound targeted to the nucleic acid encoding human B7 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human PTEN phosphorothioate antisense oligonucleotide #29559.
                                                                                                                                                                                                                                                                                                                                                                                                                                                / Match 4.6%; Score 13.4; DB 1; Length 20; Local Similarity 93.3%; Pred. No. 4.2e+02; les 14; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= a
/note= "phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 5 A; 5 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                            Example 12; SEQ ID NO 126; 88pp; English.
    Karras JG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ91393 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-00358381.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-00358381.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              765 GCCTCCACTTCTGAG 779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2 dacrecaerrerdad 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
  TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cowsert LM;
Vickers
                                        WPI; 2003-863863/80.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-181363/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-JUL-1999;
  Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US6020199-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ91393;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Monia BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ91393
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·
0
                                                                                                                                                                                                                                                                                                                                                                        The invention relates to an agent that inhibits one or more specific DNA methyl transferase isoforms (but not all DNA methyl transferase isoforms), such as an anti-DNA methyl transferase oligonucleotide or a small molecule inhibitor of DNA methyl transferase. The agents, oligonucleotides, inhibitors and methods are useful for identifying specific inhibition of specific DNA methyl transferase isoforms involved
                                                                                                                                                                                                                               New inhibitors of DNA methyl transferase isoforms, e.g. anti-DNA methyl transferase oligonucleotides or small molecule inhibitors of DNA methyl transferase, useful for treating cell proliferative and differentiation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 in cell proliferation and/or differentiation, and thus providing a treatment for cell proliferative and/or differentiation disorders, e.g. neoplasia. This polynucleotide sequence represents a human DNA MeTase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ss; human; B7-1; inflammatory skin disorder; antisense; psoriasis; confact defmatitis; atopic dermatitis; seborrheic dermatitis; nummular dermatitis; generalised exfoliative dermatitis; eczema; critical costimulatory molecule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.6%; Score 13.4; DB 1; Length 20; 93.3%; Pred. No. 4.2e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 2 A; 5 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human B7-1 targeted oligonucleotide SEQ ID 126.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DNMT 1 oligo relating to the invention
                                                                                                                                                                                                                                                                                                                                  Claim 14; Page 23; 76pp; English.
              13-MAY-2002; 2002WO-IB003120.
                                                  11-MAY-2001; 2001US-0290202P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-MAY-2001; 2001US-00851871.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6 cércerécerecher 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADE27864 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            853 CGTCCTGGCTCCAGT
                                                                                                           (METH-) METHYLGENE INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
es 14; Conserv
```

New antisense compounds useful for treating, preventing or diagnosing e.g. tumors or inflammation, are targeted to the human dual specificity protein phosphatase (PTEN) sequence.

The present invention describes phosphorothioate antisense

Claim 3; Col 41; 32pp; English.

0

Gaps

ó

```
AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ7740 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from differential efficacious responses to and side effects from N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and
                                                                                                                                                                                                                                                                                                  ö
οĘ
            the sequence encoding a human dual specificity protein phosphatase designated PTEN (also known as MAC1 and TEP1), and hybridise specifically to the human PTEN nucleotide sequence given in AAZ91361. The antisense oligonucleotides have anticancer, anti-inflammatory and anti-inflective activities. The phosphorothhoate antisense oligonucleotides can be used for diagnosis, treatment and prevention of PTEN-related diseases, e.g. infections, inflammation and tumours. The present sequence represents a phosphorothhoate antisense oligonucleotide for human PTEN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel biallelic markers used to construct a high density disequilibrium
  oligonucleotides that are targeted to the 3'-untranslated region (UTR)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human biallelic marker downstream amplification primer SEQ ID NO:9283.
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human genome; biallelic marker; high density disequilibrium map, genomic map, haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                        4.6%; Score 13.2; DB 1; Length 18; 83.3%; Pred. No. 4e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                     Seguence 18 BP; 1 A; 2 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chumakov I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 8; Page 2210; 2745pp; English.
                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                            819 GGTTGGCTGTCTTT 836
                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0082614P.
98US-0109732P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99WO-IB000822
                                                                                                                                                                                                                                                                                                                                                                                    GGTTGGCTTTGTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ74927 standard; DNA; 18
                                                                                                                                                                                   from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-013267/01.
                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-APR-1998;
23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-OCT-1999.
                                                                                                                                                                                                                                                                                                    15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ74927;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cohen D,
                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              888888888888888
                                                                                                                                                                                                                                                                                                                                              à
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2^\prime\text{-methoxyethyl} residue (2^\prime\text{-MOE}) . When cytosines in this region are 5^-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= c //note="Optionally 2'-methoxyethyl residue (2'-MOE). When //note="Optionally 2'-methoxyethyl region are 5-methylcytosines" methylcytosines"
                                                                                                                                                                                                                                                                                                                          Human, PTEN, MMAC1, TEP1, protein phosphatase; antisense; ss; antiinflammatory; cytostatic; antidiabetic; antilipaemic; infection; inflammation; tumour; diabetes; insulin resistance; insulin sensitivity; triglyceride control; cholesterol control; ISIS 29559.
are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a compound targeted to a nucleic acid encoding PTEN (a dual specificity protein phosphatase), where the compound is an antisense oligonucleotide. The antisense oligonucleotides are useful in modulating the function of nucleic acids encoding PTEN, ultimately
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides targeting nucleic acids encoding PTEN, useful for treating diabetes, increasing insulin sensitivity, or decreasing insulin resistance, blood triglyceride or cholesterol levels
                                                                                                Gaps
                                                                                              0
                                                                   Score 13.2; DB 1; Length 18;
                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
"Phosphorothioate backbone"
                                                                                                3;
                                          G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                    Human PTEN antisense oligonucleotide ISIS 29559.
                                                                               Pred. No. 4e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                      Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /note= "Optionally
1-4 are 2'-MOE all
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 15; Col 41; 38pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 methylcytosines"
15. .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mckay R;
                                                                                                                         932
                                                                                                                                                  18
                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-00358381.
99WO-US029594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-MAY-2000; 2000US-00577902.
                                                                     4.6%;
                                          Seguence 18 BP; 7 A; 7 C; 1
                                                                                                                         915 ATTATCATCACCACCACC
                                                                                                                                                 ATTGACATCACCACCAAC
                                                                                                                                                                                                                     AAS14019 standard; DNA; 18
                                                                                                                                                                                                                                                                          (first entry)
                                                                                                 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   '*tag≃
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       in a diabetic animal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-588976/66.
                                                                                   Local Similarity
                   present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               modified base
                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US6284538-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-DEC-1999;
                                                                                                                                                                                                                                                                          18-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Monia BP,
                                                                                                                                                                                                                                                AAS14019;
                                                                        Query Match
                                                                                                                                                                                           RESULT 209
                                                                                                 Matches
                                                                                                                                                                                                        AAS14019
                                                                                    Best
                                                                                                                                                                                                                                   SXSS
                                                                                                                            à
                                                                                                                                                  임
```

```
.
0
                 as diagnostics, therapeutics, prophylactics (e.g. to prevent or delay infection, inflammation or tumour formation), and as research agents and kits. The antisense compounds are also useful in treating diabetes, decreasing insulin resistance, increasing insulin sensitivity and decreasing blood triglyceride or cholesterol levels in a diabetic animal.
    compounds can used
                                                                                                                          The present sequence is an antisense oligonucleotide targetting the DNA encoding PTEN (also known as MMAC1/TEP1)
                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                    DB 1; Length 18;
                                                                                                                                                                                                                                                                           3; Indels
  modulating the amount of PTEN produced. The antisense
                                                                                                                                                                                        Sequence 18 BP; 1 A; 2 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                       Pred. No. 4e+02;
0; Mismatches
                                                                                                                                                                                                                                 4.6%; Score 13.2;
83.3%; Pred. No. 4e
                                                                                                                                                                                                                                                                                                                  819 GGTTGGCTGTGTCTTT 836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABK24051 standard; DNA; 18
                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                     Local Similarity
les 15; Conser
                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                             ABK24051/c
                                                                                                                                                                                                                                                                           Matches
8 × 3 5 5 5 5 5 5 × 8
                                                                                                                                                                                                                                                                                                                                                        q
                                                                                                                                                                                                                                                                                                                     à
```

Human; immunosuppressive; antirheumatic; antiarthritic; antiulcer; antianaemic; antipsoriatic; B7-related polypeptide; BSL1; BSL2; BSL3; autoimmune disease; rheumatoid arthritis; multiple solerosis; Hashimcto's thyroiditis; Graves' disease; Crohn's disease; psoriasis; ulcerative colitis; pernicious anaemia; bone marrow transplantation; graft versus host disease; organ transplantation; PCR primer; ss. B7-related protein, BSL2, PCR primer #17. 

(first entry)

09-APR-2002 ABK24051;

Homo sapiens

WO200194413-A2

06-JUN-2001; 2001WO-US018257

06-JUN-2000; 2000US-0209811P. 28-FEB-2001; 2001US-0272107P.

(BRIM ) BRISTOL-MYERS SQUIBB CO.

Peach R; Zhou X, Д, 吕 Yang G, Chang H, Finger JN, Mikesell GE,

WPI; 2002-090141/12.

Nucleic acids encoding B7-related polypeptides, i.e. BSL1, BSL2, or BSL polypeptides, useful for treating autoimmune diseases (e.g. rheumatoid arthritis, multiple sclerosis, and psoriasis), and graft versus host

Example 3; Page 101; 179pp; English.

The invention relates to novel nucleic acids encoding B7-related polypeptides include the BSL1, BSL2, or BSL3 polypeptides. The B7-related polypeptides include the BSL1, BSL2, or BSL3 polypeptides, or their soluble fragments. The nucleic acid, polypeptide, and antibodies are useful for treating autoimmune diseases (e.g. rheumatoid arthritis, multiple sclerosis, Hashimoto's thyroiditis, Graves' disease, Crohn's disease, ulcerative collitis, pernicious anaemia and psoriasis. They may also be used to treat tissue, bone marrow, and organ transplantation, and graft versus host disease. ABK24010-ABK24093 represent B7-related proteins, BSL1, BSL2 and BSL3 coding sequences and PCR primers of the invention

Sequence 18 BP; 2 A; 1 C; 9 G; 6 T; 0 U; 0 Other;

```
ö
                                                                                                                                                                                                                                                         Human, phosphoinositide phosphatase, PTEN, liver, kidney, cholesterol, metabolic disease, diabetes, hyperpoliferative, glucose, insulin, PEPCK, triglyceride, antisense gene therapy; cytostatic, adipose cell; antisense, phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to antisense compounds, compositions and methods for modulating the expression of phosphoinositide phosphatase (PTEN). The antisense compound is used to inhibit the expression of PTEN in cells or tissues, preferably human, or rodent, such as mouse or rat, liver, kidney or adipose cells or tissues. It is used to treat a disease or condition associated with PTEN, such as metabolic disease or condition, preferably diabetes, especially Type 2 diabetes, or a hyperproliferative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New compound, preferably an antisense oligonucleotide, that hybridizes and inhibits the expression of phosphoinositide phosphatase (PTEN), for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          and inhibits the expression of phosphoinositide phosphatase (PTEN), fo
treating diseases such as diabetes, or a hyperproliferative condition.
                            Gaps
                            0;
                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'note = "2'methoxyethyl nucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mod_base= OTHER
/note= "2'methoxyethyl nucleotides'
                                                                                                                                                                                                                                                                                                                                                                                                             /mod_base= OTHER
/note= "Phosphorothioate backbone"
                            3;
                                                                                                                                                                                                                                 Human PTEN antisense oligonucleotide, ISIS 29599.
DB 1;
              4e+02;
                            0; Mismatches
 Score 13.2;
Pred. No. 4e
                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         base= OTHER
                                                       939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 7; Page 34; 39pp; English.
                                                                                  Н
                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mckay
4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-00358381.
99WO-US029594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-JUN-2001; 2001US-00878582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-MAY-2000; 2000US-00577902.
                                                       922 TCACCACCACCTCCAGA
                                                                                18 TCACCATCACACCCCAGA
                                                                                                                                                   AAD40054 standard; DNA; 18
                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            υ
                                                                                                                                                                                                                                                                                                                                                                                                   ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                      '*tag= b
                            15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15. .18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            *tag=
                                                                                                                                                                                                                                                                                                                                                                                   .18
                                                                                                                                                                                                                                                                                                                                                                                                  *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MONI/) MONIA B P.
(COWS/) COWSERT L M.
(MCKA/) MCKAY R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-479187/51.
               Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2002058638-A1
                                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                       modified base
                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-JUL-1999;
14-DEC-1999;
                                                                                                                                                                                                        22-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-MAY-2002.
                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                              AAD40054;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Monia BP,
 Query Match
Best Local
                                                                                                                       RESULT 211
                          Matches
                                                                                                                                      AAD40054
                                                                                                                                                                ò
                                                                               g
```

```
The invention relates to a method for amplifying a nucleic acid using Single Primer Amplification (SPA). The method comprises synthesising a comparate nucleic acid containing a predetermined sequence and hairpin structure with the nested oligonucleotide extension reaction. The method is useful for amplifying a nucleic acid, preferably for amplifying a complex library of polypeptides encoded by the sequences. The engineered nucleic acid strand is useful for amplifying a nucleic acid strand by providing a nucleic acid strand by providing a nucleic acid with a predetermined sequence engineered nucleic acid strand of sequence complementary to the predetermined sequence and a hairpin structure between them and contacting the engineered nucleic acid strand with a primer containing at least a portion of the predetermined sequence of a polymerise and nucleotides under conditions suitable for polymerisation to produce a complementary nucleic acid strand. The method of the invention is useful for producing large amounts of a target nucleic acid sequence and for
                                                                                                                                                                                                                                                                          ;
0
condition. It is also used to decrease blood glucose or insulin levels in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a predetermined sequence and hairpin structure and using the template for target amplification by Single Primer Amplification.
                an animal, preferably a diabetic human or rodent. It is also used to inhibit expression of PEPCK in cells or tissues. It is also used to decrease insulin resistance, or increase insulin sensitivity, in an animal, preferably a diabetic human or rodent. It is used to decrease blood triglyceride or cholesterol levels in an animal, preferably a diabetic human or rodent. It is also used therapy. The present sequence is an animals preferably a diabetic human or rodent. It is also used to human PIEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amplifying nucleic acid by synthesizing template nucleic acid containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Primer Amplification; nested oligonucleotide extension reaction; 1; SPA; library; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ë
                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Maruyama
                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                   DB 1; Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human light chain lambda gene related oligo SEQ ID No 161.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mcwhirter J,
                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                               Sequence 18 BP; 1 A; 2 C; 5 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                   Score 13.2; DB 1
Pred. No. 4e+02;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lin Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Barbas-Frederickson S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 6; Page 35; 54pp; English
                                                                                                                                                                                                                                                                                                               836
                                                                                                                                                                                                                                                                        .;
                                                                                                                                                                                                                                                                                                                                                   18
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-DEC-2001; 2001WO-US047727.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0254669P.
2001US-0323400P.
                                                                                                                                                                                                                                   4.6%;
                                                                                                                                                                                                                                                                                                               819 GGTIGGCIGTGTCTTTT
                                                                                                                                                                                                                                                                                                                                                   GGTTGGCTTTGTCTTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABT06147 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ALEX-) ALEXION PHARM INC
                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-500537/53.
                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200248401-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hairpin; SPA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-DEC-2000;
19-SEP-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bowdish KS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABT06147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Single
                                                                                                                                                                                                                                                                                                                                                                                                                                ABT06147,
                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
88888888888888
                                                                                                                                                                                                                                                                                                                   ð
```

```
·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention comprises the amino acid and coding sequence of B7-related (BSL2) fusion proteins. The B7-related fusion proteins of the invention are useful for modulating the activation of immune or inflammatory response cells (e.g. T cells). The B7-related fusion proteins are useful for treating or preventing: transplantation rejection; graft versus host disease; asthma; chronic obstructive pulmonary disease; cancers; viral infections (e.g. HIV, herpes or encephalitis); and autoimmune disease (e.g. rheumatoid arthritis, multiple sclerosis or psoriaeis). The present DNA sequence represents a PCR primer that was used in an example of the
                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR; ss; gene therapy; B7-related fusion protein; BSL2; viral infection; immune response modulation; inflammatory response modulation; cancer; transplantation rejection; graft versus host disease; asthma; herpes; chronic obstructive pulmonary disease; HIV; encephalitis; psoriasis; autoimmune disease; rheumatoid arthritis; multiple sclerosis; primer.
amplifying simultaneously more than one different target nucleic acid sequence located on the same or different nucleic acid molecules. This polynucleotide sequence represents an oligonucleotide relating to the
                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated B7-related nucleic acid fusion molecules and fusion polypeptides, useful for diagnostic applications, modulating the activation of immune or inflammatory response cells, preventing or
                                                                                                                                                           ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.6%; Score 13.2; DB 1; Length 18; 33.3%; Pred. No. 4e+02; ve 0; Mismatches 3; Indels
                                                                                                                       Score 13.2; DB 1; Length 18; Pred. No. 4e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP; 2 A; 1 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                       6 G; 3 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                                                                                                                                                  B7-related PCR primer - SEQ ID No 33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 129; 188pp; English.
                                                                                                                                                                                           866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BRIM ) BRISTOL-MYERS SQUIBB CO
                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-JUN-2001; 2001US-00875338.
15-FEB-2002; 2002US-00077023.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      treating cancer or psoriasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-JUN-2002; 2002WO-US018049.
                                                                                                                                         Local Similarity 83.3%;
ses 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             83.3%;
                                                                                                                           4.68;
                                                                                                                                                                                           849 ACAGCGTCCTGGCTCCAG
                                                                                                                                                                                                                              ACAGGGTCCTGGGCCCAG
                                                                                                                                                                                                                                                                                                              ABT15916 standard; DNA; 18
                                                                                       7 C;
                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ή
                                                                                       BP; 2 A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-140629/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
nes 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200299119-A2,
                                                                                                                                                                                                                                                                                                                                                                                  28-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĠĒ,
                                                                                       18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-DEC-2002.
                                                         invention
                                                                                                                                                                                                                                                                                                                                                ABT15916;
                                                                                                                                                                                                                              18
                                                                                           Sequence
                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mikesell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                RESULT 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                  ABT15916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best
                                                                                                                                                                                                                                                                                                                  $ $ $ $ $ $ $ $ $
                                                                                                                                                                                             8
                                                                                                                                                                                                                            Db
```

rng.res

(first entry)

Primer LNK4. 19-JUN-1993

(revised)

25-MAR-2003

AAQ37401;

```
This invention describes a novel oligonucleotide which hybridises with and detects a nucleic acid from a filamentous bacteria cell. The filamentous bacteria cell. The filamentous bacteria cell. The filamentous bacteria can include members of the 021N Kanagawa group I, II or III, 021N-like from B1033 EU21, Alisphaera europaea EU24 Nostocoida limicola-like, Alisphaera (europaea, PR23, MC2), Alisphaera MC2 MACOBS-CC Clone 2 (B10 36), Bactothrix amylovora (BU3, EU4, EU9, EU11), Chloroflexus aurantiacus, Curtnnema variabilis (type 0041), Cytophaga, Chloroflexus aurantiacus, Curtnnema variabilis (type 0041), Cytophaga, EPTS Australian 021N isolate (EU21), EPTS Australian isolate EU32 from SAN3, Flexibacter, Herpetosiphon, H. aurantiacus, Leptothrix discophora, Megathrix sidereus EU36 Nostocoida limicolasne (EU24), CU21, Nostocoida limicolasne (EU24), Nostocoida limicolasne (EU24), Nostocoida limicolasne (EU24), CU2), Nostocoida limicolasne (EU24), CU2), Nostocoida limicolasne (EU24), Cu20, Nostocoida limicolasne (EU24), Cu20, Cu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New oligonucleotides are useful to detect filamentous bacteria in samples, particularly in activated sludge.
                                                                                                                                                                                                                                                                                                                                                                                             ss; probe; hybridisation; detection; filamentous bacteria cell;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 13.2; DB 1; Length 18;
Pred. No. 4e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                       Filament forming bacteria detecting probe SEQ ID 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 5 A; 7 C; 2 G; 4 T; 0 U; 0 Other;
  TCACCACCACCTCCAGA 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 24; 26pp; German.
                                   18 TCACCATCACACCCCAGA 1
                                                                                                                                                                              ADA83688 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-JUN-2001; 2001DE-01028400.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-JUN-2001; 2001DE-01028400.
                                                                                                                                                                                                                                                                                      20-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 83.33
Marches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Snaidr J, Beimfohr C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-314735/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (VERM-) VERMICON AG.
                                                                                                                                                                                                                                                                                                                                                                                                                      activated sludge.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chloroflexaceae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DE10128400-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-DEC-2002
922
                                                                                                                                                                                                                                     ADA83688;
                                                                                                                                RESULT 214
                                                                                                                                                   δ
                                           d
```

```
The sequences given in AAQ37394-406 are primers which were used to amplify and assemble the heavy and light chain variable regions of the antiphenyloxazolone hypridomas NQ2/12.4 and NQ10/12.5. In the first stage, Vh and Vk genes were linked together, and in the second stage the assembled product was amplified from the cell template. This in-cell PCR method can be used for gene linkage analysis, particularly for the cloning of gene combinations that are polymorphic within a population of 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                            Treatment of cell populations, partic. hybridomas - to link together copies of 2 or more non-contiguous DNA sequences to facilitate analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          primer; PCR; polymerase chain reaction; hierarchy; immunoassay; quantitative assay; fragment length; DNA sequencing; p53; mutation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                           Primer; heavy; light, chain; variable region; antiphenyloxazolone;
hybridoma; NQ2/12.4; NQ10/12.5; Vh; Vk; in-cell PCR; cloning;
polymorphic; Ig; TCR V; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.6%; Score 13.2; DB 1; Length 19;
83.3%; Pred. No. 4.3e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 3 A; 9 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Primer P53-5X2SEQ for p53 gene exon 2 sequencing.
                                                                                                                                                                                                                                                                                                                                                         Winter GP;
                                                                                                                                                                                                                                                                                                                                                      Embleton MJ, Gorochov G, Jones PT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 20; 72pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            752 CCAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                      92WO-GB001483,
                                                                                                                                                                                                                                                                                 91GB-00017352.
92GB-00012419.
                                                                                                                                                                                                                                                                                                                           (MEDI-) MEDICAL RES COUNCIL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccadadrecerregecee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT08667 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1993-076508/09.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                WO9303151-A1
                                                                                                                                                                                                                                                      10-AUG-1992;
                                                                                                                                                                                                                                                                                  10-AUG-1991;
                                                                                                                                                                                                                                                                                                 11-JUN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9601909-A1
                                                                                                                                                                                                                          18-FEB-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-SEP-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-JAN-1996.
                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT08667;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT08667
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
```

·;

0

Gaps

·,

0;

927 ACCACCTCCAGAGATT 944

ACCTACCTCCAGAGCATT 18

-

셤

AAQ37401 standard; DNA; 19 BP.

RESULT 215

AAQ37401 ID AAQ

```
Rapid and cost effective diagnosis of disease-associated mutations in the p53 gene is achieved by employing a selected number of diagnostic tools, in a hierarchy of increasing accuracy and cost per tool, in which each tool detects essentially no false positives. Tests that may be employed, in order of increasing accuracy and cost are: (a) immunoassays; (b) DNA fragment length/quantitiy analysis; and (c) DNA sequencing of regions most likely to harbour point mutations. AAT08667-85 are primers used in DNA sequencing analysis. The primers are generally nested inside the amplification primers (AAT08645-66), i.e. closer to the exon, although in some cases the preferred sequencing primer is in fact the amplification primer. The sequencing primer is conjugated to a fluorescent mol. such as fluorescent, rhodamine or cyannine. The present sequence is used to sequence the sense strand of exon 2, and is a preferred sequencing primer
                                                                                                                                                                                             Testing for disease-associated p53 gene mutation(s) using a hierarchy of assay techniques - e.g. immunoassay, DNA amplification and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ovary cancer; breast cancer; oncogenesis; metastasis; diagnosis; gene therapy; polymerase chain reaction; PCR; primer; single strand conformation polymorphism; SSCP; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OVCA1; ovarian cancer 1 gene; tumour suppressor gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                               Stevens JK;
                                                                                                                                                                                                                                                                Claim 11; Page 26; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGGGTTGGAAGCGTCTC 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (FOXC-) FOX CHASE CANCER CENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95US-00399986.
95US-00493754.
                                                                                                (VISI-) VISIBLE GENETICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96WO-US003117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 83.3%;
Matches 15; Conservative
                                                               95US-00388381
             95WO-US008605
                                              94US-00271946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 816 CAGGGTTGGCTGTGTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OVCAl gene exon 3 5' primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT36928 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                               Diamandis E, Dunn JM,
                                                                                                                                                                WPI; 1996-097638/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene therapy;
single strand
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   For this exon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09627609-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-JUN-1995;
               07-JUL-1995;
                                              08-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-MAR-1996;
                                                               14-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-SEP-1996
                                                                                                                                                                                                                                   sequencing.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Godwin AK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAT36928;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT36928
à
```

```
PCR primers (AAT36924-53) were designed to screen the complete coding region (AAT36922) and intron-exon boundaries of the novel human candidate tumour suppressor gene OVCA1. The primer given in AAT36928 is based on the 5' end of exon 3 of the OVCA1 gene. SSCP analysis was used to screen the OVCA1 coding region and intron-exon boundaries in 100 ovarian tumours and 13 tumour cell lines. 15 Mutations, many in the introns flanking exon A, were detected. These appeared to be acquired somatic mutations. Multiple common and rare polymorphisms were identified in the coding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 extension products, which are indicative of positions of selected species of nucleotide in nucleotide sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This sequence represents a primer for exon 2 of the p53 gene. This sequence can be used in the method of the invention for determining the position of at least one selected species of nucleotide, in a region of interest, in a target nucleic acid polymer, in a sample. The method comprises combining the sample with a reaction mixture to synthesise
                                      Tumour suppressor gene, OVCAI - useful to develop prods. for diagnosis, monitoring and therapy of malignant diseases.
                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer; amplify; pathogen identification; mutation detection; nucleic acid analysis; microorganism characterisation; human; HLA type determination; p53 gene exon 2; ss.
                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                   Length 19;
                                                                                                                                                                                                                                                                                                                                   3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lacroix J,
                                                                                                                                                                                                                                                                     Sequence 19 BP; 3 A; 10 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                   Score 13.2; DB 1;
Pred. No. 4.3e+02;
                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Larson MT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 4; Page 19; 69pp; English.
                                                                                      Example 1; Page 27; 60pp; English.
                                                                                                                                                                                                                                                                                                                                                                778
                                                                                                                                                                                                                                                                                                                                                                                              CTAGCCCTCCACCTCTCA 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Primer for exon 2 of p53 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Dunn JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT99856 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96US-00640672.
96US-00684498.
97US-00807138.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97WO-US007135.
                                                                                                                                                                                                                                                                                                   4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (VISI-) VISIBLE GENETICS INC
                                                                                                                                                                                                                                                                                                                                                                CTAGGCCTCCACTTCTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                   15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hui M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1997-549755/50.
            WPI; 1996-425378/42
                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9741259-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Leushner J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7661-VON-90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT99856;
                                                                                                                                                                                                                                                                                                                                                                   761
                                                                                                                                                                                                                                             sednence
                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 218
                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT99856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                              du
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tumour marker;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 13.2; DB 1; Length 19;
Pred. No. 4.3e+02;
0; Mismatches 3; Indels
```

..

species of

```
nucleotide in the region of interest and evaluating the products produced, characterised in that the sample, which is combined with the produced, characterised in that the sample, which is combined with the polymers in natural abundance. The method can be used to detect mutations, particularly mutations of medical significance, in samples that type ancillary to transplant procedures, detect and identify microorganisms, datermine particularly pathogenic microorganisms, in a sample and in in situ sequencing reactions to produce sequencing fragments in a histological specimen
  chain extension products indicative of the positions of the
$$$$$$$$$$$$$$$$$$$
```

Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;

```
Gaps
                            ·:
Score 13.2; DB 1; Length 19;
Pred. No. 4.3e+02;
0; Mismatches 3; Indels
                                                  816 CAGGGTTGGCTGTCTC 833
                                                                          cadddrirdaaadccircic 19
4.6%;
            Local Similarity 83.3
nes 15; Conservative
 Query Match
                          Matches
                                                    à
                                                                          g
```

· 0

N

```
AAT99826 standard; DNA; 19 BP
               Primer for exon 2 of p53 gene
           07-MAY-1998 (first entry)
       AAT99826;
RESULT 219
```

PCR primer; amplify; p53 gene exon 2; multiplex amplification reaction, nucleic acid analysis; microorganism characterisation; human; mutation detection; ss.

Homo sapiens Synthetic.

WO9741258-A1 06-NOV-1997.

97WO-US007134. 29-APR-1997;

96US-00640672 01-MAY-1996;

96US-00684498 19-JUL-1996;

Human homolog of the Drosophila fused gene.

Example 1; Page 66; 81pp; English.

(VISI-) VISIBLE GENETICS INC.

Lacroix J;

Larson MT,

Dunn JM,

Hui M,

Leushner J,

WPI; 1997-549754/50

'sing nucleic acid containing sample - comprises performing multiplex fication reaction and reacting amplified fragments in sequencing Analysing nucleic acid containing sample reaction mixture.

Example 4; Page 18; 37pp; English.

amplification primer pairs, one pair for each region to be analysed, to produce a mixture of amplified fragments, and determining the sequence of at least one species of amplified fragment, characterised in that the sequence is determined by combining the mixture of amplification fragments with a sequencing reaction mixture for the production of sequencing fragments, and evaluating the sequencing fragments produced. The method can be used to analyse regions in the mucleic acids in the sample for the presence of mutations, or detect and type microorganisms. This sequence represents a primer for exon 2 of the p53 gene. This sequence can be used in the method of the invention for analysing a nucleic acid containing sample. The method comprises performing a multiplex amplification reaction on the nucleic acids in the sample using

```
ö
The method directly performs sequencing reactions on complex DNA mixtures
                                                                                                                                                                                                                         Human homologue, Drosophila fused gene; intracellular signal, human hedgehog-parched protein; HH-PTC; RNA transcription, RNA translation; cancer diagnostic; prophylaxis; karotyping analysis; cancer; embryonic repair; tissue repair; wound healing; neurodegenerative disease; testicular function; PCR primer; ss.
                                                          Gaps
                                                                                                                                                                                                         PCR primer used to amplify cDNA encoding a human fused homologue.
                                                          ..
0
                                      Length 19;
                                                         3; Indels
                  Sequence 19 BP; 3 A; 5 C; 7 G; 4 T; 0 U; 0 Other;
                                      Score 13.2; DB 1;
Pred. No. 4.3e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                        (KARO-) KAROLINSKA INNOVATIONS AB.
                                                                            816 CAGGGTTGGCTGTCTC 833
                                                                                               2 CAGGGTTGGAAGCGTCTC 19
                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                            Zaphiropoulos PG
                                                                                                                                                                                                                                                                                                                                                                                       98SE-00002292.
                                     Query Match
Best Local Similarity 83.3%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                            97SE-00004788
                                                                                                                                              AAX81944 standard; DNA; 19
                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-418918/35
                                                                                                                                                                                     09-SEP-1999
                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                   409932609-A1
                                                                                                                                                                                                                                                                                                                                                         18-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                           19-DEC-1997;
26-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                             loftgard R,
                                                                                                                                                                                                                                                                                                                                     01-JUL-1999
                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                  AAX81944;
                                                                                                                           RESULT 220
                                                                                                                                      AAX8194
SXS
                                                                                             qq
                                                                            ਨੇ
```

homologue to molecules associated with the Drosophila fused gene. The protein is involved in eliciting an intracellular signal in the human hedgehog-patched (HH-PTC). The protein, its antibodies and pharmaceutical compositions comprising them can be used as medicaments. The presence of a fused gene, cDNA, mRNA, protein or subsequences of these in a fused gene, cDNA, mRNA, protein or subsequences of these in a fused gene, cDNA, mRNA, protein or subsequences of these in a biological sample are useful, e.g. as a marker to assess in vivo and/or in situ RNA transcription and/or translation, in cancer diagnostics, in prophylaxis, etc. The polymucleotide sequence can also be used to derive gene sequences. The labeled probes can also be useful in karotyping analysis as markers of the fused gene. The polymucleotides may also be used in gene therapy methods. The polymptide is useful as a lead compound in the design of analogues and mimics, as well as for screening for agonists and antegonists. The products may also be used for the study of different conditions, such as cancer and development of cancer therapies, the regulation of gene transcription, embryonic repair and tissue repair/wound healing, neurodegenerative diseases, and testicular PCR primers AAX81944-45 were used to amplify cDNA encoding a human function

Sequence 19 BP; 1 A; 9 C; 4 G; 5 T; 0 U; 0 Other;

```
MTf DNA related PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                        WO200113951-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200206525-A2
                                                                                                                                                  19-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-JAN-2002.
                                                                                                          01-MAR-2001.
                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABK40968;
                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                         Kato Y,
                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABK40968/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .,
                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV73500-V73506 are oligonucleotide primers used in a method for the specific inhibition of amplification of a DNA target sequence. This process is used to identify biological material such as bacteria or viruses, e.g. to distinguish between ribosomal sequences from different bacteria that are all primed by the same broad-range primers, especially to distinguish between Escherichia coli, Staphylococcus aureus and Neisseria gonorthoea, to prevent unwanted amplification of contaminating bacterial DNA sequences, e.g. in Taq DNA polymerase preparations, for genotyping by blocking amplification of non allotype and to eliminate
                                                                                                                                                                                                                                                                                                                                                                                     Inhibition of amplification of target DNA sequence - with non-extendable phosphodiester oligo-nucleotide complementary to inter-primer region.
                                                                                                                                                                                          inhibition; amplification; target; identification; genotyping;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             in representational difference analysis. Expensive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.6%; Score 13.2; DB 1; Length 19; 83.3%; Pred. No. 4.3e+02; ve 0; Mismatches 3; Indels
 Length 19;
                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 5 A; 1 C; 11 G; 2 T; 0 U; 0 Other;
Score 13.2; DB 1;
Pred. No. 4.3e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        peptide nucleic acids are not required
                                                                                                                                                                                                                                                                                                                            (UYNY ) UNIV NEW YORK STATE RES FOUND.
                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Col 13-14; 16pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      919 TCATCACCACCACCTCC 936
                                         791
                                                            18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                             BP.
                                                                                                                                                                                                                                                                                     97US-00832449
                                                                                                                                                                                                                                                                                                        97US-00832449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCATCCCCACCTTCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          83.3%;
           Best Local Similarity 83.3%;
Matches 15; Conservative
                                         774 TCTGAGGGCAGCCCCTCT
                                                           retressecasecer
                                                                                                                                                                        Blocking oligonucleotide P1
                                                                                                                                                                                                      contamination; allotype; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF62207 standard; DNA; 19
                                                                                                             AAV73500 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 83.3
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-069718/06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 unwanted sequences
                                                                                                                                                                                                                                                                                     03-APR-1997;
                                                                                                                                                                                                                                                                                                        03-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-MAY-2001
                                                                                                                                                     23-FEB-1999
                                                                                                                                                                                                                                              US5849497-A.
                                                                                                                                                                                                                                                                                                                                                Steinman C;
                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF62207;
                                                                                                                                 AAV73500;
   Query Match
                                                                                          RESULT 221
                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    XXXX
                                                            g
                                           à
```

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chondrogenesis promoters containing membrane-bound transferrin-like protein, useful in diagnosis, prevention and treatment of diseases due to abnormal chondral metabolism and bone metabolism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; obesity associated-biallelic marker; chromosome 10; obesity; ss; drug response; hyperuticaemia; digestive pathology; hypertension; cancer; hepatic function disorder; cardiovascular disease; hyperlipidaemia PRR; insulin disorder; atheromatous disease; cardiac insufficiency; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention relates to chondrogenesis promoters containing a membrane-bound transferrin-like protein (MTf). Chondrogenesis promoters, chondrogenesis regulators, MTf activators, MTf antagonist-containing chondral differentiation inhibitors are useful in diagnosis, prevention and treatment of diseases due to abnormal chondral metabolism and bone metabolism e.g. bone diseases. The present sequence represents a PCR primer specific for DNA encoding MTf
Chondrogenesis promoter; membrane-bound transferrin-like protein; MTf; Chondrogenesis regulator; MTf activator; bone metabolism; mouse; chondral differentiation inhibitor; bone disease; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human obesity-associated biallelic marker upstream PCR primer #45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.6%; Score 13.2; DB 1; Length 19; 33.3%; Pred. No. 4.3e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 5 A; 9 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 3; Page 20; 57pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                798 AAGAGCTCTCCTCCAACT 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-JUN-2001; 2001WO-IB001477.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-JUL-2000; 2000US-0219704P.
                                                                                                                                                                                                                                                                                                                                                                             21-AUG-2000; 2000WO-JP005590.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 99JP-00232966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGACCTCCCTCCATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABK40968 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ä.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CHUS ) CHUGAI SEIYAKU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fujimoto K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-218409/22.
```

WPI; 2002-155043/20 

```
(GEST ) GENSET
```

m Bihain Chumakov I, Abderrahim H, Blumenfeld M, Cohen D,

Set of novel map-related biallelic markers, preferably located on obesity disorder-associated chromosomal regions on chromosomes 3, 10 and 19, useful, for e.g. detecting statistical correlations between marker allele and a phenotype.

Example 2; Page 237; 311pp; English.

The invention relates to a set of novel map-related biallelic markers, preferably located on obesity disorder-associated chromosomal regions on chromosomes 3,10 and 19. The markers are useful for genotyping or estimating the frequency of an allele in a population, for detecting an disease involving drug responses, obesity or disorders related to obesity, such as hyperuricaemia, digestive pathology, hepatic function disorders, cancer, cardiovascular disease, hypertension, hyperlipidaemia, insulin disorders, atheromatous disease and cardiac insufficiency. The markers are useful for detecting a statistical correlation between a biallelic marker and a phenotype. This sequence represents a PCR primer used to amplify a human obesity-associated biallelic marker

Sequence 19 BP; 10 A; 4 C; 4 G; 1 T; 0 U; 0 Other;

Gaps ; Score 13.2; DB 1; Length 19; Pred. No. 4.3e+02; 0; Mismatches 3; Indels 0; Mismatches 4.6%; Query Match 4.6 Best Local Similarity 83.3 Matches 15; Conservative  $\overset{\sim}{5}$ 

ö

843 Н TATGGGTCTTTTTCTTCTC 826 IGTGTCTCTTTCTTCTC 18

셤

RESULT 224 AAQ37339/c

AAQ37339 standard; DNA; 20 (revised) 25-MAR-2003 20-JUN-1993 AAQ37339;

BP.

primer RW01, for bacterial 16S rRNA gene. PCR

(first entry)

Cerebrospinal fluid; CSF; amplification; meningitis; ss.

Synthetic.

WO9303186-A1

18-FEB-1993. 

91US-00738393. 92WO-US006365 31-JUL-1992; 31-JUL-1991; (HOFF ) HOFFMANN LA ROCHE INC.

Leong DU; Greisen KS,

WPI; 1993-076541/09.

Detecting bacteria causing meningitis in cerebrospinal fluid - by amplifying target regions and detecting using panel of probes which includes universal bacterial probe.

Disclosure; Page 12; 65pp; English

```
ö
The PCR primer RW01 was used in conjunction with PCR primer DG74 for amplification of bacterial DNA to yield a ca. 370 bp PCR prod. corresp. to base pairs 1170-1540 of the E. coli 16S rRNA gene. This target region is of sufficient length to encompass two regions of high variability characterised for the 16S rRNA gene, variable regions 8 and 9. The variability in these regions may encompass probes which are to some degree specific to the various species of bacteria found in the cerebrospinal fluid (CSF). See also AAQ37314-60. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                           Gaps
                                                                                                                                           0;
                                                                                                                     Score 13.2; DB 1; Length 20;
Pred. No. 4.6e+02;
0; Mismatches 3; Indels
                                                                                                    Sequence 20 BP; 6 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
                                                                                                                                                             921 ATCACCACCACCTCCAG 938
                                                                                                                                                                                m
                                                                                                                                                                                                                                  AAT28558 standard; DNA; 20 BP
                                                                                                                       4.68;
                                                                                                                                83.3%;
                                                                                                                                                                               20 Arccccaccrrccrccag
                                                                                                                                          15; Conservative
                                                                                                                                Local Similarity
                                                                                                                       Query Match
                                                                                                                                                                                                                                                    AAT28558;
                                                                                                                                                                                                             RESULT 225
                                                                                                                                                                                                                      AAT28558/c
                                                                                                                                         Matches
 à
```

Universal bacterial detection primer #1. (first entry) 01-APR-1997

Detection; probe; amplification primer; bacterial pathogen; pneumonia; Bscherichia coli; Klebsiella pneumoniae; Pseudomonas aeruginosa; Proteus mirabilis; Streptococcus pneumoniae; Staphylococcus aureus; Staphylococcus epidermidis; Enterococcus facealis; respiratory tract; Staphylococcus saprophyticus; Streptococcus pyogenes; urinary tract; Haemophilus influencae; Moraxella catarrhalis; septicaemia; meningitis; infection; intra-abdominal infection; skin infection; bacterial resistance; beta-lactam antibiotic; ss.

Synthetic.

WO9608582-A2

21-MAR-1996.

95WO-CA000528. 12-SEP-1995; 94US-00304732. (BERG/) BERGERON M G. 12-SEP-1994;

(OUEL/) OUELLETTE M. (ROYP/) ROY P H.

Ouellette M, Bergeron MG,

Roy PH;

WPI; 1996-179953/18.

Method for the detection of bacterial species using probes and primers -allows detection and quantification of antibiotic resistant bacteria in patients, the environment and food.

Claim 66; Page 49; 216pp; English.

The sequences given in AAT28588-59 represent universal primers which were used in the method of the invention for the detection of bacterial species in a sample. These sequences are derived from 165 or 23 ribosomal RNA gene sequences. The method of the invention comprises using probes and/or amplification primers which are specific, ubiquitous and sensitive for determining the presence and/or amount of nucleic acids from selected bacterial species in any sample, where the bacterial nucleic acid comprises a selected traspet region hybridisable with the probes or primers. The method comprises contacting the sample with the

```
Streptococcus pneumoniae, Staphylococcus aureus, Staphylococcus epidermidis, Enterococcus faecalis, Staphylococcus saprophyticus, epidermidis, Enterococcus faecalis, Staphylococcus saprophyticus, Erreptococcus pyogenes, Haemophilus influenzae and Moraxella catarrhalis. These bacterial species are associated with approx. 90% of urinary tract infections and with a high percentage of other severe infections including septicaemia, meningitis, pneumonia, intra-abdominal infections, skin infections and other severe respiratory tract infections. The method may also be used to evaluate a bacterial resistance to beta- lactam
probes or primers and detecting the presence and/or amount of hybridised primers or amplification products as and indication of the presence and/or amount of the bacterial species. This method may be used to detect commonly encountered bacterial pathogens, e.g. Bscheritchia coli, Klebsiella pneumoniae, Pseudomonas aeruginosa, Proteus mirabilis,
                                                                                                                                                                                                                                                                                                                                                                                                                                            antibiotics
```

Sequence 20 BP; 5 A; 1 C; 12 G; 2 T; 0 U; 0 Other;

```
Gaps
                       .
0
4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02;
                       Indels
                       Mismatches
                    0;
                                              919 TCATCACCACCACCTCC 936
                                                                   Н
                       15; Conservative
             Local Similarity
  Query Match
             Best Loca
Matches
                                               à
```

18 TCATCCCCACCTTCCTCC RESULT

```
AAT74100 standard; DNA; 20 BP.
                                                            (revised)
                                                            25-MAR-2003
                                                                         25-SEP-1997
                            AAT74100;
```

Gram negative bacteria; Gram positive bacteria; human blood, septicemia; hybridisation; polymerase chain reaction; PCR; ss. Escherichia coli target region amplification primer RW01. (first entry) 

Escherichia coli.

US5635348-A 03-JUN-1997

94US-00348683 02-DEC-1994; 90US-00593176. 91US-00696448. 92US-00973334. 05-OCT-1990; 06-MAY-1991; 06-NOV-1992;

(HOFF ) HOFFMANN LA ROCHE INC

DG: Leong WPI; 1997-309820/28.

Detection of Gram-negative bacterial nucleic acid - by amplification and hybridisation with specified probes, useful for diagnosing Gram-negative pacterial septicaemia.

Example 1; Col 19; 23pp; English.

The present sequence represents primer RWO1 for amplifying a target region of a bacterial nucleic acid. Detecting bacterial nucleic acid agequences in a sample (e.g. blood sample) suspected of containing such a bacterial nucleic acid involves the bacterial nucleic acid containing a selected target region, which is then amplified and the amplified target region hybridises with a probe. This method can be used for detecting fram-negative bacteria in human blood samples. It is particularly useful for diagnosis of Gram-negative bacterial septicaemia. The method can also be modified so that it can detect other bacteria present in blood, or

```
0;
other samples. The method provides for the rapid detection and identification of bacteria, partly because it is not necessary to culture the bacteria first. It also provides less opportunities for a mistake to occur than in the current Gram-staining methods. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                         Gaps
                                                                                                                                                                                         .
0
                                                                                                                                                      Length 20;
                                                                                                                                                                                       3; Indels
                                                                                                                      Sequence 20 BP; 6 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
                                                                                                                                                      Score 13.2; DB 1;
Pred. No. 4.6e+02;
0; Mismatches 3;
                                                                                                                                                                                                                        938
                                                                                                                                                         4.6%;
                                                                                                                                                                         Local Similarity 83.3
les 15, Conservative
                                                                                                                                                         Query Match
                                                                                                                                                                                            Matches
                        888888888
```

20 ATCCCCACCTTCCTCCAG 921 ATCACCACCACCTCCAG ð 2

```
BP.
                     AAT75708 standard; DNA; 20
                                                                  (first entry)
                                                                  16-MAR-1998
                                           AAT75708;
227
 RESULT
```

0

Mouse genomic DNA clone PCR primer D4Rck6f.

Murine, leptin receptor; OB-R; obesity; diabetes; high blood pressure; high cholesterol; body weight; PCR primer; ss.

Mus musculus WO9726335-A1 24-JUL-1997 Synthetic.

97WO-US001010. 16-JAN-1997; 

96US-00586594. 96US-00599974. (UYRQ ) UNIV ROCKEFELLER 16-JAN-1996; L4-FEB-1996;

Proenca R, Lee G, Friedman JM,

Ioffe E;

WPI; 1997-385338/35

Leptin receptor, OB-R, polypeptide - useful to treat obesity, optionally in conjuction with treatment for diabetes, high blood pressure and high cholesterol.

Claim 32; Page 118; 171pp; English.

The present sequence represents a specifically claimed primer used in the present invention describing a leptin receptor (GB-R) protein. The OB-R can be used to treat obscibly, optionally in conjunction with a treatment for diabetes, high blood pressure and high cholesterol, or in cosmetic compositions for reducing body weight. It may also be used in agriculture to produce leaner food animals, e.g. beef cattle, swine poultry, sheep, an antibody specific for OB-R can be used to measure the presence of OB-R in a sample, optionally in vivo, while the nucleic acid molecule encoding OB-R can be used to detect defects in the OB-R polypeptide associated with obese phenotypes, or diagnostically to measure its encoded RNA and protein in nutritional disorders. The nucleic acid molecule can be used to antisense nucleic acid molecule, or the antisense with AIDS, cancer or anorexia nervosa

Sequence 20 BP; 5 A; 3 C; 5 G; 7 T; 0 U; 0 Other;

Query Match

DB 1; Length 20; Score 13.2; 4.68;

18 GCTTCGTCTTCTGAGGGC 1

셤

; 0

Gaps

RESULT 229

```
AAT92758-T92817 represent amplification primers for human genes which are used in the chimeric non-human animal of the invention. The chimeric non-human animal of the invention, preferably a mouse, contains a foreign chromosome(s) or chromosome fragment. The animal is produced by obtaining a hybrid cell by fusion of a cell containing the foreign chromosome with a cell having the ability to form microcells. The microcells are prepared, and fused with cells having differentiative pluripotency to form cells having differentiative pluripotency to cform cells having differentiative pluripotency. The chromosome segment to term. The foreign chromosome segment is at least chromosome segment could also contain genes associated with human contains a region for an antibody. The chromosome segment could also contain genes associated with human disease seen. The expression of foreign genes (especially human genes) in a non-chuman antimodies. Particular cells of the chimeric animal which contains an early of contains and fused with human contains the foreign genes (especially human genes) associally contains and fused with human contains and fused and fused with human contains the foreign genesic can be isolated and fused with human contains and conta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             transgenic mouse, chromosome fragment, hybridoma production, microcell, fluntington's disease gene, pluripotent cell, interleukin-2 gene, myeloma cell; cytochrome b-5 reductase, DIA1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primer; amplify; human gene; chimeric non-human animal; antibody;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    myeloma cells to produce hybridomas capable of expressing the foreign
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chimeric animal containing foreign chromosome - for expression of
                                  ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oshimura M, Ishida I;
                                  Indels
Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                   Primer #4 for cytochrome b-5 reductase (DIA1).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 5; Page 27; 142pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene (e.g. to produce the antibody)
                                                                             832 TCTTTTCTTCTGAAGA 849
                                ..
                                                                                                                                2 rcrregerrcrcraaga 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              foreign gene, e.g. an antibody
                                                                                                                                                                                                                                                                AAT92779 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95JP-00242340.
96JP-00027940.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96WO-JP002427.
     83.38;
                                                                                                                                                                                                                                                                                                                                                                05-FEB-1998 (first entry)
                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fomizuka K, Yoshida H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (KIRI ) KIRIN BEER KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1997-178822/16.
        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9707671-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-AUG-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-FEB-1996;
                                15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                AAT92779;
                             Matches
                                                                                                                                                                                                                                  AAT92779/
                                                                                à
                                                                                                                             g
```

```
AAT92758-T92817 represent amplification primers for human genes which are used in the chimeric non-human animal of the invention. The chimeric non-human animal of the invention, preferably a mouse, contains a foreign chromosome(s) or chromosome fragment. The animal is produced by obtaining a hybrid cell by fusion of a cell containing the foreign chromosome with a cell having the ability to form microcells. The microcells are prepared, and fused with cells having differentiative pluripotency to form cells having differentiative pluripotency and containing the foreign chromosome. These cells are then introduced into an embryo, which is then implanted and brought to term. The foreign chromosome segment is at least chromosome segment could also contain genes associated with human disease, such as the interleukin-2 gene, and the Huttington's disease contain care and chromosome segment could also contain genes associated with human disease, such as the interleukin-2 gene, and the Huttington's disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene. The expression of foreign genes (especially human genes) in a non-
human animal is useful for efficient production of proteins, especially
of human antibodies. Particular cells of the chimeric animal which
express the foreign genetic material can be isolated and fused with
myeloma cells to produce hybridomas capable of expressing the foreign
gene (e.g. to produce the antibody)
                                                                                                                                                                          PCR primer; amplify; human gene; chimeric non-human animal; antibody; transgenic mouses, chromosome fragment; hybridoma production; microcell; Huntington's disease gene; pluripotent cell; interleukin-2 gene; myeloma cell; cytochrome b-5 reductase; DIA1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chimeric animal containing foreign chromosome - for expression of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oshimura M, Ishida I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                       Primer #2 for cytochrome b-5 reductase (DIA1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 2; Page 23; 142pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              foreign gene, e.g. an antibody.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  782
                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                     96WO-JP002427.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            95JP-00242340.
96JP-00027940.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  765 GCCTCCACTTCTGAGGGC
                AAT92771 standard; DNA; 20
                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 83.3
hes 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yoshida H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (KIRI ) KIRIN BEER KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1997-178822/16.
                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                        WO9707671-A1
                                                                                                                                                                                                                                                                                                                                                                                                                     29-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-AUG-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-FEB-1996;
                                                                                               05-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tomizuka K,
                                                                                                                                                                                                                                                                                                                                                                             06-MAR-1997
                                                                                                                                                                                                                                                                              Synthetic
                                                        AAT92771;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loc
Matches
AAT92771
                                     à
```

ď

15; Conservative

Matches

Query Match Best Local Similarity

.; 0

GCTTCGTCTTCTGAGGGC

g

· 0

Gaps

.. 0

3; Indels

DB 1; Length 20;

4.6%; Score 13.2; DB 1; B3.3%; Pred. No. 4.6e+02; vative 0; Mismatches 3

RESULT 230

AAV51864

```
AAV20865-V20991 are PCR primers used in the construction of a novel fusion protein constructed from a papillary renal cell carcinoma (PRCC) associated protein and the transcription factor TFE3 which is used in a method for the diagnosis, prophylactic and therapeutic treatment of papillary renal cell carcinoma. The translocation t(X;1) (p11.2;q21.2) found in PRCC results in a fusion of the TFE3 gene with a new chromosome protein between the N-terminus of PRCC and almost the whole of the TFE3 gene. Normal TFE3 transcripts are no longer produced. Two other fusion partners for TFE3 have also been detected; NonO, from a invX (p11.2; q13-24 or 12) translocation and the PSF splice factor gene, resulting in t(X; 1) (p11.2;p34). These trans-locations define a subgroup of PRCC generally encountered in patients younger than 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pluripotent cell; intrinsic gene; chimeric non-human animal; construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;
                                                                                                                                                                                                                                                              Diagnosing papillary renal cell carcinoma by detecting gene trans-
location - resulting in fusion of TFRB gene with some other gene, also
related vectors, transformed cells, specific binding reagents, peptide(s)
encoded by fusions and therapeutic anti-sense sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 10 A; 5 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytochrome b-5 reductase PCR primer DIA1 #4.
                                                                                                                                                    (CANC-) CANCER RES CAMPAIGN TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 33; 71pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       839
                                                                                                                                                                                        Shipley J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-JP000860.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97JP-00062309
                                                                                                              96GB-00016986.
                                                                          97WO-GB002209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGCTGTGTCTCTTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rrecrerereragiraci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV52776 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KIRI ) KIRIN BEER KK
                                                                                                                                                                                        Clark J,
                                                                                                                                                                                                                              WPI; 1998-159557/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-MAR-1998;
W09806871-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09837757-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-FEB-1997;
                                                                          13-AUG-1997;
                                                                                                              13-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15;
                                    19-FEB-1998
                                                                                                                                                                                          Cooper C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV52776;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV52776,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zea mays genome in order to detect polymorphic markers. Such markers can be used in the construction of allele-specific primers and probes for amplification or hybridisation, e.g. to determine common or disparate ancestry between 2 or more plants, to monitor the genetic contribution of an ancestral plant, to trace the progeny of proprietary plants, in certification of a hybrid plant or to identify the progeny of a back-crossed plant with an ancestral plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV51705-V52008 are reverse PCR primers used to amplify fragments of the
                                                                                                                                                                                        Polymorphic marker; allele-specific; probe; amplification; PCR primer; hybridisation; plant; hybrid certification; genetic contribution; progeny; back-cross; hybrid; ancestry; corn; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Brassica species allele-specific oligonuclectide probes and primers useful for plant breeding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRCC; papillary renal cell carcinoma; TFB3; transcription factor; fusion protein; translocation; diagnosis; treatment; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Murigneux A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 6 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 4.6e+02;
0; Mismatches 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human PRCC-TFE3 construct DNA PCR primer #9.
                                                                                                                                                      Zea mays genome reverse PCR primer #160.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sapolsky RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 1; Page 52; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       711 GICCCAGGAGAGTGACTC 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Greceagascricarie 20
                                        AAV51864 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                        97WO-US021782
                                                                                                                                                                                                                                                                                                                                                                                                                                            96US-0032069P
97US-00813507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAV20973 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-SEP-1998 (first entry)
                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 83.3°
...Ass 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Landry BS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1998-333252/29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
Homo sapiens.
                                                                                                                                                                                                                                                                                                                              WO9824796-A1
                                                                                                                                                                                                                                                                                                                                                                                                        01-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                            02-DEC-1996;
07-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                  11-JUN-1998
                                                                                                                  02-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lemieux B,
                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV20973;
                                                                                                                                                                                                                                                                                            Zea mays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             m
                                                                              AAV51864;
```

RESULT 231

à

AAV20973,

0;

Gaps

· 0

Ishida I; Oshimura M, Hanaoka K, Yoshida H, WPI; 1998-480821/41. Tomizuka K,

cells containing foreign chromosomes or fragments - and nonhuman chimeric animals constructed using them and expressing foreign genes such as human antibiotic genes. Pluripotent

Example 5; Page 40; 217pp; Japanese.

The present internation describes a method of obtaining putniputorent certis containing foreign chromosomes or their fragments (preferably at least 670 kb in length, especially more than 1000 kb) by preparing cancerous cells containing the foreign chromosomes or fragments, then fusing these with pluripotent cells such as embryonic stem cells, embryonic productive cells, embryonic cancer cells or their mutants. Also described are: (1) a method of obtaining hybridoma cells by fusing a cell with a high ability to produce hybridoma cells (such as mouse A) cells) with a cell containing the foreign chromosomes or fragments (such as normal human diploid cells); (2) a method of utilising pluripotent cells to produce chimeric and transgenic non-human animals (especially mammals such as mice) which can express the foreign chromosomes or fragments controlled; and (3) chimeric animals, their offspring and tissues and cells derived from the offspring production of monoclonal antibodies for inventions can be used for the production of monoclonal antibodies for chumans. They can also be used in the production of chimeric and chumans. They can also be used in the production of chimeric and chumans as modelals for the study of human diseases. AMY52755 to AAV52828 are open armines used in every model or the production. The present invention describes a method of obtaining pluripotent cells PCR primers used in examples from the present invention

Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

0; Score 13.2; DB 1; Length 20; Pred. No. 4.6e+02; 0; Mismatches 3; Indels 3; Indels .0 765 GCCTCCACTTCTGAGGGC 782 derregrerrerdadde 1 4.6%; Conservative Query Match Best Local Similarity Matches 15; Conserv 18 à g

AAV52768 standard; DNA; 20 BP

AAV52768 

Cytochrome b-5 reductase PCR primer DIA1 #2. 27-NOV-1998 (first entry)

Pluripotent cell; intrinsic gene; chimeric non-human animal; construction; human; antibiotic gene; cancer cell; embryonic; PCR primer;

Homo sapiens Synthetic.

W09837757-A1

03-SEP-1998

98WO-JP000860 97JP-00062309 32-MAR-1998; 28-FEB-1997;

(KIRI ) KIRIN BEER KK.

Oshimura M, Hanaoka K, Pomizuka K, Yoshida H,

WPI; 1998-480821/41

potent cells containing foreign chromosomes or fragments - and a chimeric animals constructed using them and expressing foreign genes such as human antibiotic genes. Pluripotent cells human

Example 2; Page 36; 217pp; Japanese

contraining foreign chromosomes or their fragments (preferably at least 670 kb in length, especially more than 1000 kb) by preparing cancerous cells containing the foreign chromosomes or fragments, then fusing these with pluripotent cells such as embryonic stem cells, embryonic cancer cells or their mutants. Also described are: (1) a method of Obtaining hybridoma cells by fusing a cell cestribed are: (1) a method of Obtaining hybridoma cells by fusing a cell with a high ability to produce hybridoma cells (such as mouse A9 cells) with a cell containing the foreign chromosomes or fragments (such as normal human diploid cells); (2) a method of utilising pluripotent cells to produce chimeric and transgenic non-human animals (especially mammals such as mice) which can express the foreign chromosomes or fragments or introduced; and (3) chimeric animals, their offspring and tissues and cells derived from the offspring production of monoclonal antibodies for the production of monoclonal antibodies for human type and therefore not antigenic in humans. They can also be used in the production of chimeric and transgenic animals which express useful foreign proteins, or which can serve as models for the study of human diseases. AAV52755 to AAV52828 are The present invention describes a method of obtaining pluripotent cells PCR primers used in examples from the present invention

Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

Gaps .; 0 Score 13.2; DB 1; Length 2 Pred. No. 4.6e+02; 0: Mismatches 3; Indels 0; Mismatches 4.6%; 83.3%; 15; Conservative Local Similarity Query Match Matches

0;

765 GCCTCCACTTCTGAGGGC 782 Н 18 GCTTCGTCTTCTGAGGGC

Š QΩ

;

Gaps

AAV71815

AAV71815 standard; DNA; 20 BP

AAV71815;

(first entry) 15-MAR-1999

Alpha-v beta-3 MAb D12 VH region PCR primer SBA884.

mouse; human; vitronectin; alpha-v beta-3; receptor; restencis; cancer; metastasis; rheumatoid archritis; atherosclerosis; angiogenesis; diabetic retinopathy; inflammation; macular degeneration; osteoporosis; Paget's disease; hyperparathyroidism; hypercalcaemia; therapy; immunotherapy; D12HZHC 1-0; PCR; primer; ss. Humanised antibody; monoclonal antibody; MAb; antibody engineering; 

Synthetic.

WO9840488-A1

17-SEP-1998

98WO-US004987. 12-MAR-1998;

97US-0039609P. 12-MAR-1997; (SMIK ) SMITHKLINE BEECHAM CORP.

Taylor AH; Johanson KO, Jonak ZL,

New anti alpha_v beta_3 vitronectin receptor antibodies - used for

```
amplification of a synthetic gene (see AAV1801) encoding a portion of the murine D12 monoclonal antibody heavy chain variable region (WH) that is modified in humanised D12 VH D12HZHC 1-0. The amplified DNA was ligated into pCR2000 vector, and a DNA fragment from this vector was utilised in the construction of an expression vector for humanised D12 VH (see AAV17199). D12 is a murine anti-human alpha-v beta-3 virronectin receptor monoclonal antibody. Humanised D12 antibodies of the invention can be used for passive immunotherapy of disorders mediated by the alpha-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vaccine, eye disease, conventional trachoma, nonendemic trachoma, paratrachoma, inclusion conjunctivitis, genital disease, perihepatitis, nongonococcal uretritis, epidymitis, cervicitis, salpingitis, PCR primer, bartholinitis, pneumopathy, venereal lymphogranulomatosis, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primers AAZ01426-Z06209 were uged to amplify open reading frames (ORFs) of the genome of Chlamydia trachomatis (See AAZ01425). These ORFs encode polypeptides (see AAZ04574-Y37949) which can be used as vaccines against Chlamydia trachomatis. Antisense and ribozyme sequences can also be used to control growth of the microorganism. Chlamydia trachomatis is responsible for a large number of diseases. e.g. eye diseases such as conventional trachoma, nonendemic trachoma, paratrachoma, and inclusion
immunotherapeutic treatment of e.g. diabetic retinopathy, inflammatory disorders, atherosclerosis, restenosis, cancers or osteoporosis.
                                                                                                                                                                                                                                                               beta-3 vitronectin receptor, e.g. restenosis and angiogenic-related
                                                                                               SBA884 and SBA843 (see AAV71814) were used in the PCR
                                                                                                                                                                                                                                                                                                                                                        4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              primer used to amplify an ORF of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 3 A; 8 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Genome sequence of Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page 1620; 1755pp; English.
                                                          Example 13; Page 46; 97pp; English
                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                    769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ccasseraccirsscccc 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97FR-00015041.
97FR-00016034.
98US-0107077P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98WO-IB001939
                                                                                                                                                                                                                                                                                                                                                                                                                                    752 CCAGGGTCCCTAGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ03610 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 83.3
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-371125/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9928475-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-DEC-1997;
04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                        disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ03610;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
       ð
```

ö

Gaps 0;

```
;
0
                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         thioredoxin and thioredoxin reductase gene which have cytostatic activity and are useful for inhibiting tumour growth and metastasis in mammals. They may also be used as hybridization probes to detect the presence of the thioredoxin and thioredoxin reductase mRNAs in mammalian cells. They may also be used as molecular weight markers. The antisense of oligonucleotides are nuclease resistant due to the presence of phosphorothioate internucleotide linkages. AAZ00504 2200543 represent oligonucleotide primers capable of binding to human thioredoxin reductase
                                                                                                                                                                                                                                                                                                                                                                                                                               Thioredoxin, thioredoxin reductase, human, antisense, primer, metastasis, cytostatic, tumour growth inhibitor, detection, nuclease resistant; phosphorothioate linkage, ss.
conjunctivitis; genital diseases such as nongonococcal uretritis, epidymitis, cerricitis, salpingitis, perihepatitis, bartholinitis; pneumopathy in breast feeding infants; and venereal lymphogranulomatosis. The polypeptides of the invention may be of use in treating these
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense oligonucleotides against thioredoxin and thioredoxin reductase genes, useful for inhibiting tumor growth and metastasis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                   Human thioredoxin reductase binding antisense oligonucleotide 3028.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention describes novel antisense oligonucleotides against
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                              ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 13.2; DB 1; Length 20;
Pred. No. 4.6e+02;
0; Mismatches 3; Indels
                                                                                                                              4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02;
                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 20 BP; 6 A; 7 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                               Sequence 20 BP; 2 A; 6 C; 4 G; B T; 0 U; 0 Other;
                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GENE-) GENESENSE TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 4; Page 21; 88pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  805
                                                                                                                                                                                             899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cecaderreccaacaccc 19
                                                                                                                                                                                                                           GGGTTGTACTTACTTCTC 19
                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lee YS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0073196P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCTGGTGCCAAGAGCTC
                                                                                                                                                                                             882 GAGATGCACTTACTTCTC
                                                                                                                                                                                                                                                                                                          AAZ00531 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15; Conservative
                                                                                                                                                               15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Young AH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-469328/39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09938963-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                     06-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wright JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                       AAZ00531;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   788
                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 α
                                                                                                                                Query Match
                                                                     diseases
                                                                                                                                                                                                                                                                          236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                          ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dp
      828882
                                                                                                                                                                                               à
```

```
neutralising epitope; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-OCT-1998;
18-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA40789
õ
                                                                                                                                                                                                                                                                                                                                                                                             This sequence represents a PCR primer for a human leukocyte antigen-A (HLA-A) allele, and can be used in the methods of the invention. The method are for the distinction of HLA-A allele type. In the first method a set of primers corresponding to each group specific to the base sequence common to each gene in at least one specific group consisting of specific HLA-A allele group is used to carry out a PCR to amplify selectively the HLA-A allele group in each specific group as a group. In the second method the amplified product obtained by the PCR is developed by electrophoresis and the presence of an amplified DNA band of a specific size is confirmed to distinct a specific type of the HLA-A allele group as a group. Further, in the second method, if a specific group as a group. Further, in the second method, if a specific type of HLA-A allele group is distinguished the following method, are further carried out: RFLP method, PCR-RFLP method, SSOP method, PCR-RSOP method, The methods are further carried out: RFLP method. The methods can be used for the diagnosis of HLA-A type in humans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Respiratory disease; pneumonia; bronchitis; heart disease; sarcoidosis; sinusitis; purulent otitis media; erythema nodosum; pharyngitis; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                Distinction of HLA-A allele type - using PCR and electrophoresis.
                                                                                                                                     HLA-A allele, PCR primer, human leukocyte antigen-A, diagnosis,
allele type determination, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR primer used to amplify an ORF of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                          Claim 5; Page 7; 21pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             929 CACCCTCCAGAGAATTTT 946
                                                                                                            HLA-A allele PCR primer A3-25T
                                        AAZ10987 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                         98JP-00305892.
                                                                                                                                                                                                                                                                               97JP-00297145.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cacccrccagargargrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX93246 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                    (SHIO ) SHIONOGI & CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Thes 15; Conserve
                                                                                                                                                                                                                                                                                                                             WPI; 1999-511119/43.
                                                                                                                                   HLA-A allele;
                                                                                                                                                                                                                                                      27-OCT-1998;
                                                                                                                                                                                                                                                                               29-OCT-1997;
                                                                                       29-OCT-1999
                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                          JP11216000-A
                                                                                                                                                                                                                                 10-AUG-1999,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-SEP-1999
                                                                                                                                                                       Synthetic.
                                                                AAZ10987;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX93246
                  RESULT 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX93246/c
                              AAZ1098
                                         à
```

```
AAX91991-X97517 represent PCR primers used to amplify open reading frames and other nucleic acid sequences from the genome of Chlamydia pneumoniae (See AAX91990). C. pneumoniae causes respiratory disease such as pneumonia and bronchitis and is thought to be a contributing factor in heart disease, sarcoidosis, sinusitis, purulent otitis media, erythema nodosum or pharyngitis. The polypeptides encoded by the open reading frames of the C. pneumoniae genome (see AAX34894 - AAX35879) can be used in immunogenic compositions as vaccines. Vectors containing C. pneumoniae especially where the vector directs the expression of a neutralising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Antisense oligonucleotide, phosphorothioate, TNFalpha; cytokine; inhibit; tumour necrosis factor alpha; inflammatory bowel disease; diabetes; rheumatoid arthritis; infectious disease; multiple sclerosis; hepatitis; pancreatitis; atopic dermatitis; allograft rejection; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 13.2; DB 1; Length 20;
Pred. No. 4.6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human TNFalpha antisense oligonucleotide ISIS# 14833.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20 BP; 7 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Genome sequence of Chlamydia pneumoniae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 1574; Disclosure; 1912pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19 crcrcarcacactric 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA40789 standard; DNA; 20 BP.
                                                                                                                                                                                                     98WO-IB001890.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.6%;
                                                                                                                                                                                                                                                        97FR-00014673
                                                                                                                                                                                                                                                                                      98US-0107078P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-00166186.
99US-00313932.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              726 CTCTGGTCATAGGACTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 83.3%,
Local Similarity 83.3%,
Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                          Chlamydophila pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             epitope of C. pneumoniae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammatory disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1999-357842/30.
                                                                                                                                                                                                                                                                                                                                            (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200020645-A1.
                                                                                   WO9927105-A2
                                                                                                                                                                                                  20-NOV-1998;
                                                                                                                                                                                                                                                                                      04-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                  Griffais R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-APR-2000
Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA40789;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 239
```

.**.** 

```
invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallello markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               pharmaceutical agents acting on a disease as well as other treatment. N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel biallelic markers used to construct a high density disequilibrium map of the human genome.
                                                                                                                                      Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                AAZ65654 to AAZ69578 represent human biallelic markers from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human biallelic marker upstream amplification primer SEQ ID NO:5296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human genome; biallelic marker; high density disequilibrium map;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 12 A; 5 C; 3 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chumakov I;
                                             Chumakov I;
                                                                                                                                                                                                                     Claim 9; Page 1752; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ٣
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0082614P.
98US-0109732P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-IB000822.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGTGTCTCTTTTCTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CIGIGIGGCITITITICI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ70940 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cohen D, Blumenfeld M,
                                             Cohen D, Blumenfeld M,
                                                                                                                                                                     map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-013267/01.
                                                                                           WPI; 2000-013267/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GEST ) GENSET
(GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAZ70940;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ70940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                         targets a region of the human tumour necrosis factor alpha (TNFalpha)

targets a region of the human tumour necrosis factor alpha (TNFalpha)

nucleotide sequence. TrRalpha is an important cytokine that plays a role
in host defence. It is produced mainly in macrophages and monocytes in

response to infection, invasion, injury or inflammation. Overexpression

of TNFalpha can result in disease states, particularly in infectious,

inflammatory and autoimmune diseases. The invention relates to antisense

oligonucleotides, such as that represented by the present sequence which

are capable of modulating that represented by the present sequence which

are capable of modulating that represented by the present and may

also optionally contain at least one 2'-O-methoxyethyl modification. The

oligonucleotides are useful for modulating the expression of human

TNFalpha in cells and tissues, reducing a human cell inflammatory

cresponse, reducing the blood glucose level in a human and treating a

chample a disease or condition associated with TNFalpha. Examples of

diseases associated with TNFalpha include diabetes, inflammatory bowel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          infectious disease, hepatitis, atopic dermatitis or allograft rejection. The antisense oligonucleotides are also useful for modulating the function of a selected nucleic acid sequence in adipose tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                             This sequence represents an antisense oligonucleotide sequence which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human biallelic marker upstream amplification primer SEQ ID NO:7138
                                                                                                                                                                       Oligonucleotide for treating diseases associated with human tumor necrosis factor-alpha (TNF-alpha) such as, diabetes and rheumatoid arthritis, comprises nucleotide sequence complementary to intron of nucleic acid encoding TNF-alpha.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   multiple sclerosis, pancreatitis, rheumatoid arthritis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 10 C; 1 G; 4 T; 0 U; 0 Other;
                                                                            Butler MM, Shanahan WJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                               Claim 24; Page 40; 283pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              759 CCCTAGGCCTCCACTTCT 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0082614P.
98US-0109732P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-IB000822.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCCTAAGCCCCCAATTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ72782 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15; Conservative
                                                                            Baker BF, Bennett CF,
                           (ISIS-) ISIS PHARM INC
                                                                                                                          WPI; 2000-303808/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            W09954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-APR-1998;
23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-SEP-2001
```

Query Match

à qq

AAZ72782;

AAZ72782/c

. 0

Gaps

0;

3; Indels

```
invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAA65579 to AAA77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies compositions and methods of the invention can also be useful for the invention can also be useful for the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterization of the pharmaceutical differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and present invention
                                                                                                  AAZ65654 to AAZ69578 represent human biallelic markers from the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 20 BP; 6 A; 7 C; 1 G; 6 T; 0 U; 0 Other;
Page 1360; 2745pp; English
Claim 8;
```

Score 13.2; DB 1; Length 20; Pred. No. 4.6e+02; 0; Mismatches 3; Indels 888 CACTTACTTCTCAGCTTC 905 20 4.68; 83.3%; Conservative Query Match Best Local Similarity Labes 15; Conserv

. 0

Gaps

, 0

CACTACTTCTTAGCATC m g à

208/c AAZ70208 standard; DNA; 20 BP. (first entry) 10-SEP-2001 AAZ70208; RESULT 242 AAZ70208/(
XX
AC AAZ7/
XX
DT 10-5|
XXX
DDE Human
XXM Human
XXM Human
XXM Homo
XXM Homo
XXX C Homo
XX C Homo
XXX C Homo
XX C Homo
XXX C Homo
XX C

Human biallelic marker upstream amplification primer SEQ ID NO:4564. Human genome, biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer; diagnosis; ss

Homo sapiens

W09954500-A2

99WO-IB000822. 21-APR-1999; 28-OCT-1999

98US-0082614P. 21-APR-1998; 23-NOV-1998;

(GEST ) GENSET

Novel biallelic markers used to construct a high density disequilibrium map of the human genome. WPI; 2000-013267/01.

Chumakov I;

Blumenfeld M,

Cohen D,

Claim 8; Page 1204; 2745pp; English.

AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the

4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02;

Best Local Similarity

Query Match

Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;

```
.
0
human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3357, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Foreign chromosome; microcell fusion; homologous recombination; antibody; targeting vector; transgenic animal; disease model; knockout animal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel method of producing cells containing a modified foreign chromosome or chromosome fragment. The method comprises: (a) fusing a microcall comprising the foreign chromosome or chromosome fragment, with a cell having a high efficiency for homologous recombination; (b) marking the desired site of insertion of the foreign chromosome using a targeting vector; and (c) inducing deletion or translocation at the marked site. Transposinic animals produced by the method are useful to provide disease models and knockout animals, and in the production of human proteins, particularly human antibodies. This sequence is used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Producing a cell containing modified foreign chromosomes, useful for the generation of transgenic animals.
                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                             4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02; Ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oshimura M, Ishida I;
                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Primer 2 for human cytochrome b-5 reductase gene DIA1.
                                                                                                                                                                                                       Sequence 20 BP; 5 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Yoshida H, Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; Page 57; 316pp; Japanese.
                                                                                                                                                                                                                                                                                                                   917 TATCATCACCACCCT 934
                                                                                                                                                                                                                                                                                                                                                       N
                                                                                                                                                                                                                                                                                                                                                                                                                               1931/c
AAA09931 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98JP-00236169.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99WO-JP004518,
                                                                                                                                                                                                                                                              ilarity 83.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                     19 TATCATCAAAACCACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (KIRI ) KIRIN BEER KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-246479/21.
                                                                                                                                                                                                                                                          Local Similarity
es 15; Conserv
                                                                                                                                                                         present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200010383-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        romizuka K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-MAR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kuroiwa Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA09931;
                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 243
                                                                                                                                                                                                                                                                                                                                                                                                                               AAA09931
     888888888888888
                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                    d
```

```
Mouse IL-5 receptor-alpha antisense oligonucleotide ISIS #16938
                                                                                                                                                                                                      Karras JG,
                                                                                                                                                                                                                         WPI; 2000-594648/56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200055314-A2
                                                                                                    WO200058512-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-MAR-1999;
                                                                                                                                                                26-MAR-1999;
                                                                                                                                                                                   SISI (-SISI)
                                                                        Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            08-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-SEP-2000
                                                                                                                        05-0CT-2000
                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA54198;
                                                                                                                                                                                                       Dean NM,
                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 246
                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA54198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
    0
                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel method of producing cells containing a modified foreign chromosome or chromosome fragment. The method comprises:

(a) fusing a microcall comprising the foreign chromosome or chromosome fragment, with a cell having a high efficiency for homologous recombination; (b) marking the desired site of insertion of the foreign chromosome using a targeting vector; and (c) inducing deletion or translocation at the marked site. Transpenic animals produced by the method are useful to provide disease models and knockout animals, and in the production of human proteins, particularly human antibodies. This sequence is used in the method of the invention
                                                                                                                                                                           Foreign chromosome; microcell fusion; homologous recombination; antibody; targeting vector; transgenic animal; disease model; knockout animal;
                                                                                                                                                                                                                                                                                                                                                                                       Producing a cell containing modified foreign chromosomes, useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .;
0
      ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 13.2; DB 1; Length 20;
Pred. No. 4.6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                      Ishida I;
      Indels
                                                                                                                                                        Primer 4 for human cytochrome b-5 reductase gene DIA1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 20 BP; 7 A; 6 C; 6 G; 1 T; 0 U; 0 Other;
      3;
                                                                                                                                                                                                                                                                                                                                       Oshimura M,
      Mismatches
                                                                                                                                                                                                                                                                                                                                        Hanaoka K,
                                                                                                                                                                                                                                                                                                                                                                                                                      Example 5; Page 62; 316pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                  generation of transgenic animals.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTCCACTTCTGAGGGC 782
      .
                        782
                                            Н
                                                                                              AAA09939 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.6%;
                                                                                                                                                                                                                                                                            99WO-JP004518
                                                                                                                                                                                                                                                                                                 98JP-00236169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTTCGTCTTCTGAGGGC
                          765 GCCTCCACTTCTGAGGGC
                                            18 ścrrcercriciak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAC73740 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 83.3
Matches 15; Conservative
     Conservative
                                                                                                                                                                                                                                                                                                                                        Yoshida H,
                                                                                                                                                                                                PCR primer; human; ss.
                                                                                                                                                                                                                                                                                                                     (KIRI ) KIRIN BEER KK.
                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-246479/21
                                                                                                                                                                                                                                      WO200010383-A1
                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                             23-AUG-1999;
                                                                                                                                                                                                                                                                                                 21-AUG-1998;
                                                                                                                                                                                                                                                                                                                                       Tomizuka K,
Kuroiwa Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-FEB-2001
                                                                                                                                     05-JUL-2000
                                                                                                                                                                                                                                                          02-MAR-2000
      15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAC73740;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                  AAA09939
                                                                                                                                                                                                                                                                                                                                                    Kuroiwa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 245
                                                                          RESULT 244
      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAC73740
                                                                                      AAA09939
                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2X2X2X
                                            g
                          à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Preproendothelin; endothelin; antisense oligonucleotide; therapy; treatment; inhibition; synthesis; lung disease; pulmonary hypertension; obliterative bronchiolitis; asthma; obstructive pulmonary disease; human;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence is an oligonucleotide used for antisense modulation of interleukin-5 (IL-5) signal transduction. Oligonucleotides were designed to target nucleic acids encoding IL-5 and IL-5 receptor-alpha. The antisense oligonucleotides may be used for the treatment of diseases associated with IL-5 signal transduction, IL-5 expression or IL-5 receptor-alpha expression. Such diseases include asthma and eosinophilic syndrome. The oligonucleotides are also useful for research uses and to prevent or delay infection, inflammation or tumour formation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Antisense oligonucleotide compound used to treat asthma and eosinophilic syndrome in humans modulates interleukin-5 signal transduction.
                                     cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Antisense oligonucleotide (WH26) directed against preproendothelin-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ó
Mouse, interleukin-5; IL-5; signal transduction; antisense oligonucleotide; antiasthmatic; immunosuppressive; C
IL-5 receptor-alpha; asthma; eosinophilic syndrome; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 13.2; DB 1; Length 20;
Pred. No. 4.6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 23; Page 70; 156pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ж,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-0125000P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-MAR-2000; 2000WO-US040074.
                                                                                                                                                                                                                                                                                                                                                                                                         17-MAR-2000; 2000WO-US007318.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-00280799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           801 AGCICTCCTCCAACTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA54198 standard; cDNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mckay
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCTGGCCTCGAACTCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 83.3
nes 15; Conservative
                                                                                                              inflammation; cancer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PHARM INC
```

Smith APL, Higenbottam TW,

. 0

```
Sequence 20 BP; 4 A; 6 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                            CRF2 receptor antisense oligonucleotide #3.
                                                                                                                                                                                                                                                                                         post-traumatic stress disorder; ss
     (UNTH-) UNITED THERAPEUTICS CORP.
                                                                    Claim 26; Fig 17; 54pp; English.
                                                                                                                                                                                 705 CAGCGAGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                      13-JAN-2000; 2000WO-US000819
                                                                                                                                                                                                                         AAA73566 standard; DNA; 20
                                                                                                                                                                                                                                                28-NOV-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                             (DUPO ) DUPONT PHARM CO
                                                                                                                                                    Query Match
Best Local Similarity
Trans 15; Conserve
                                  WPI; 2000-647072/62.
                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-482825/42.
                                                                                                                                                                                                                                                                                                               WO200042178-A2
                                                                                                                                                                                                                                                                                                                                                  13-JAN-1999;
                                                                                                                                                                                                                                                                                                    Unidentified
                                                                                                                                                                                                                                                                                                                          20-JUL-2000
                 Corder R,
                      Lees DDM
                                                                                                                                                                                                                                     AAA73566;
                                                                                                                                                                                                                                                                                                                                                                         IO SP
                                                                                                                                                                                                              RESULT 247
ð
                                                                                                                                                                                            셤
```

cascscraccassas

m

Claim 8; Page 21; 34pp; English

mammal.

99US-0115748P

0;

Conservative

```
The present sequence is an antisense oligonucleotide. This sequence is directed against the mRNA of the Corticotropin Releasing Factor subtype-2 (CRF_2) receptor, and hence substantially reduces CRF_2 receptor expression in the brain. CRF is known to play an important part in controlling the pituitary-adenocortical system and in mediating the behavioural, autonomic and immune responses to stress. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel compound for diagnosing, preventing and treating immune disorders, comprising an oligonucleotide that specifically hybridizes with a nucleic acid sequence encoding B7 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention provides sequences of antisense oligonucleotides targeted at the murine and human B7-1 and B7-2 coding and mRNA sequences. The antisense sequences have phosphorothioate backbones and some
                                                                                                                                                              sequence can be used to treat psychiatric disorders such as anxiety, obsessive-compulsive disorder, panic disorders, post-traumatic stress disorder, phobias and depression. The present sequence can also be used in screening assays to determine compounds that have activity for the treatment of the psychiatric disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nucleotides are 2'-methoxyethoxy residues. The sequences can be used in the treatment of inflammatory and autoimmune disorders, including asthma, juvenile diabetes mellitus, myasthenia gravis, Graves' disease, rheumatoid arthritis, allograft rejection, inflammatory bowel disease,
                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     psoriasis, systemic lupus erythematosus, contact
                                                                                                                                                                                                                                                                                                                                                                                                                           ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; mouse; B7-1; B7-2; antisense; PCR primer; inflammation;
                                                                                                                                                                                                                                                                                                                                                                  Query Match 4.6%; Score 13.2; DB 1; Length 20; Best Local Similarity 83.3%; Pred. No. 4.6e+02; Matches 15; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 13.2; DB 1; Length 20;
Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human B7-1 antisense oligonucleotide SEQ ID NO: 225.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                autoimmune disorder; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 0 C; 11 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                multiple sclerosis, psoriasis, systemic luj
dermatitis, rhinitis, allergies and cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Karras JG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 19; Page 97; 162pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18 rchrchchchchrchrch 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAY-2000; 2000WO-US014471.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00326186.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    919 TCATCACCACCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAF33143 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vickers TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-049991/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200074687-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-DEC-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF33143;
                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF33143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                       Antisense oligonucleotides directed against human preproendothelin-1 can be used to inhibit the synthesis of preproendothelin-1 and endothelin-1. Combinations of active antisense oligonucleotides achieve a greater effect than individual antisense oligonucleotides. The antisense oligonucleotides have applications for treating lung disease such as pulmonary hypertension, obliterative bronchilolitis, asthma or chronic obstructive pulmonary disease, they are also useful for treating diseases caused or aggravated by excess production of endothelin. The antisense oligonucleotides are described in GENESEQ records AAA54136-A54157 and AAA54192-A554205. This antisense oligonucleotide is designated WH26
                                                                                                                                                                             Antisense oligonucleotides complementary to human preproendothelin-1 mRNA and capable of inhibiting synthesis of preproendothelin-1 useful for treating lung diseases such as pulmonary hypertension and asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CRF2; receptor; antisense oligonucleotide; psychiatric disorder; anxiety; Corticotropin Releasing Factor; pituitary-adenocortical system; phobia; obsessive-compulsive disorder; panic disorder; depression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New chimeric antisense oligonucleotides for treating psychiatric disorders such as anxiety, obsessive-compulsive disorder, panic disorders, post-traumatic stress disorder, phobias and depression in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                               Vane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.6%; Score 13.2; DB 1; Length 2
83.3%; Pred. No. 4.6e+02;
ative 0; Mismatches 3; Indels
                                                               Rothblatt M,
```

antisense inhibitor ISIS #126021.

(first entry)

ð

```
Human; ss; PARP; Poly (ADP-ribose) polymerase; antisense oligonucleotide; cytostatic; nootropic; neuroprotective; antiinflammatory; antidiabetic; immunosuppressant; hyperproliferative disorder; cancer; cellular injury; oxidative stress; neurological disorder; parkinsoniem; apoptosis; meningitis-associated intracranial complication; ischaemia; probe; inflammatory disorder; autoimmune disorder; arthritis; diabetes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAR-2001; 2001WO-US006572.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                         WO200164955-A1
                                                                                                                                                                             Key
modified_base
                                                                                                                                                                                                                                         modified_base
                                                                                                                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-MAR-2000;
           18-DEC-2001
                                   Human PARP-1
                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                 07-SEP-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Popoff I,
The present invention describes an antisense compound (I) up to 30 nucleobases in length, where (I) inhibits expression of daxx (also known as Fas binding protein. CENP-C binding protein. (also death associated protein 6 and EAP for Ets-1 associated protein. (I) has cytostatic and antiinflammatory activity, and can be used in antisense therapy and as a modulator of daxx. (I) is useful for inhibiting the expression of daxx in therapeutics for the treatment of diseases associated with the expression of daxx in prophylaxis e.g. to prevent or delay infection, inflammation or tumour formation and as research reagent. The present sequence represents an inhibitory human daxx antisense phosphorothicate oligonucleotide which
 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel antisense compounds capable of modulating expression of daxx useful for diagnosis, prophylaxis and treatment of diseases associated with expression of daxx.
                                                                                                                                                                                       Human daxx inhibitory antisense phosphorothioate oligonucleotide SEQ:29.
                                                                                                                                                                                                               Antisense oligonucleotide; daxx; inhibition; phosphorothioate; Fas binding protein; CENP-C binding protein; dap6; BAP; cytostatic; antiinflammatory; death associated protein 6; Ets-1 associated protein; infection; inflammation; tumour formation; ss.
 Gaps
 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 13.2; DB 1; Length 20; Pred. No. 4.6e+02;
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 3 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
   ٠.
ش
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 15; Col 42; 59pp; English.
                          948
   .
                                                   18
                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.6%;
                                                                                                                                                                                                                                                                                                                                                            24-JAN-2000; 2000US-00490692
                                                                                                                                                                                                                                                                                                                                                                                   24-JAN-2000; 2000US-00490692
                          931 CCCTCCAGAGAATTTTAC
                                                   1 cccrccagraargrirac
                                                                                                                   AAF72928 standard; DNA; 20
                                                                                                                                                                   (first entry)
  15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                     Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-217744/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
Les 15; Conserv
                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                          US6180353-B1
                                                                                                                                                                   24-APR-2001
                                                                                                                                                                                                                                                                                                                                   30-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                            AAF72928;
                                                                                                                                                                                                                                                                                                                                                                                                                                    Dean NM,
                                                                                           RESULT 249
   Matches
                                                                                                                                          g
```

'note= "All cytidine residues are 5-methyl cytidine"

/mod_base= OTHER

Д

*tag=

/mod_base= OTHER /note= "Phosphorothioate backbone"

Location/Qualifiers

ಡ

.20 /*tag= /*tag= d
/mod_base= OTHER
/note= "2' methoxyethyl nucleotides"

ъ

16. .20

2000US-00517467.

Cowsert LM;

/mod_base= OTHER /note= "2'-methoxyethyl nucleotides"

O

*tag=

```
ö
                                                                                                                                                                                                                      The invention relates to antisense oligonucleotides targeted to human PARP nucleic acid and inhibiting expression of human PARP. PARP (Poly (ADP-ribose) polymerase plays an important role in chromatin decondensation, DNA replication, DNA repair, gene expression, malignant transformation, cellular differentiation and apoptosis. The antisense oligonucleotide inhibitors are useful for inhibiting the expression of PARP in human cells or tissues. They are also useful for treating a human with a disease associated with PARP especially hyperproliferative disorders (e.g. cancer), cellular injury resulting from oxidative stress, neurological (e.g parkinsonism, meningitis-associated intracranial architics) and disbetes. The present sequence is an antisense
                                                          Antisense compound useful for treating hyperproliferative, neurological, inflammatory and autoimmune disorders and diabetes inhibits human PARP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 13.2; DB 1; Length 20;
Pred. No. 4.6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 7 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                       Claim 3; Page 84; 168pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15; Conservative
WPI; 2001-602570/68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
```

ö

Gaps

.; 0

3; Indels

Mismatches

Conservative

Matches

827 .; 0

810 CCAACTCAGGGTTGGCTG 3 ccaccrcacidercrc

ð g

20

AAS45660/c ID AAS45660 standard; DNA; 20 BP.

RESULT 250

AAS45660;

AXB

734

717 GGAGAGTGACTCTGGTCA

ò

BP.

AAH03141 standard; DNA; 20

AAH03141/c

(first entry)

15-JUN-2001

AAH03141;

```
g
```

GGAGATTGACTATGGCCA 2

19

BP.

```
The invention relates to detecting target bacterial species suspected to be present in a sample, comprising contacting nucleic acids of target be bacterial species with an amplification primer pair derived from a bacterial species but ubiquitous for different strains, amplifying the bacterial species but ubiquitous for different strains, amplifying the cucleic acid and detecting the presence or amount of an amplified sequence as an indication of the presence or amount of the target bacterial species. The invention includes primers and probes (ABA76862-CC BABA7684) against the target bacterial species, espeially B. coli, CK. preumoniae, P. aeruginosa, P. mirabilis, S. pneumoniae, S. aureus, C. S. epidermidis, B. faecalis, S. saprophyticus, S. pyogenes, H. influenzae, C. A. suspected to be present in a sample which is obtained from human patients, animals, environment or food, and which consists of one or more patients, animals, environment or food, and which consists of the bacterial genes encoding resistance to antibiotics such as bla(fem), bla(fbh), bla(fbh), addb, aacdl, aacd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Method for detecting target bacterial species in a sample, comprises detecting the presence or amount of bacterial nucleic acid amplified by a primer derived from bacterial DNA, specific for the target bacterial
                                                                                                                                                                                                                                         Detection; bacterial species; animal; food; environment; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 1 C; 12 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (IDII-) IDI INFECTIO DIAGNOSTIC INC.
                                                                                                                                                                                                primer SEQ ID NO 126,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 17; Page 49; 168pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95NZ-00501596
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95NZ-00501596
                                                  20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ouellette M,
                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                       antibiotic resistance; ss.
                                             ABA76950 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-615034/71.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                           Universal PCR
                                                                                                                                             28-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bergeron MG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-SEP-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                   29-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                  NZ501596-A.
                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                ABA76950;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           species.
```

Roy

```
Microorganism identification; pathogen; DNA sequencing; HLA type;
bi-directional sequencing; infection; mutation detection; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention provides a composition containing 4 dNTPs and at least one ddNTP and a thermally stable polymerase which incorporates ddNTPs into an extending nucleic acid polymer at a rate of not less than 0.4 times the rate of dNTP incorporation. This can be used with the PCR primers provided in the invention to detect the presence of microorganisms, such as Chlamydia trachomatis, HIV or human papillomavirus, in a sample. In addition, it can be used to detect mutations in a specific gene, to determine HLA type, and to produce sequencing fragments for further study
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genetic marker; genetic disease diagnosis; cystic fibrosis; haemophilia; sickle cell disease; muscular dystrophy; Huntington's disease; retinoblastoma; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Composition for detecting microorganisms, comprising deoxynucleotide triphosphates, dideoxynucleotide triphosphate, and thermostable polymerase to incorporate dideoxynucleotide triphosphate into extending
                                                                         Microorganism detection method related oligonucleotide SEQ ID NO: 165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.6%; Score 13.2; DB 1; Length 20; 13.3%; Pred. No. 4.6e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 6 A; 1 C; 10 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human genetic marker PCR primer SEQ ID NO: 42.
                                                                                                                                                                                                                                                                                                                                                                                      Lacroix J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Col 105; 62pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  921 ATCACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                        96US-00640672.
96US-00684498.
97US-00807138.
                                                                                                                                                                                                                                                                                                                                                                                    Dunn JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ო
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP
                                                                                                                                                                                                                                             99US-00311260.
                                                                                                                                                                                                                                                                                                                      98US-00009483
                                                                                                                                                                                                                                                                                                                                                    (VISI-) VISIBLE GENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 83.3%;
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Arcccaccrrccrccag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF89453 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                   Hui M,
                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-289718/30.
                                                                                                                                                    Unidentified
                                                                                                                                                                                  US6214555-B1
                                                                                                                                                                                                                                             13-MAY-1999;
                                                                                                                                                                                                                                                                                        19-JUL-1996;
27-FEB-1997;
                                                                                                                                                                                                                                                                                                                      20-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                   Leushner J,
                                                                                                                                                                                                               10-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF89453;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF89453
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

0;

ö

Gaps

; 0

Score 13.2; DB 1; Length 20; Pred. No. 4.6e+02; ); Mismatches 3; Indels

; 0

Conservative

4.68;

83.3%;

919 TCATCACCACCACCTCC 936

à 셤

rcarccccaccrrccrcc 1

18

Isolated genes (Gene 216) from human chromosome 20p13-p12 and the proteins they encode, useful for the prevention, diagnosis and treatment of asthma, obesity and inflammatory bowel disease.

(GENO-) GENOME THERAPEUTICS CORP.

WPI; 2001-639428/73.

Keith T;

13-APR-2000; 2000US-00548797. 13-APR-2001; 2001WO-US012245.

WO200178894-A2.

25-OCT-2001.

```
The present invention describes a method of inentifying the presence of a plurality of genetic markers in a subject, involving generating extension products using PCR primers flanking the plurality of markers, separating the extension products depending on their melting temperatures, and analysing them to determine the presence or absence of each genetic analysing them to determine the presence or absence of each genetic analysing them to determine the presence or absence of each genetic flanking from the diagnosis of genetic diseases, including familial hypercholesterolaemia, cystic filtorosis, Tay-Sachs, thalassaemia, sickle cell disease, phenylketonuria, galactosaemia, fragile X syndrome, sickle cell disease, phenylketonuria, galactosaemia, fragile X syndrome, maturity onset diabetes, cystinuria, methylmolonic acidaemia, urea cycle disease, acaptonuria, hypolaeraes, hereditary haemochromatosis, content of the proposis coli, hereditary nonpolyposis colorectal cancer, Huntington's disease, adilt polycystic kidney disease, argininaemia, chunchington's disease, adilt polycystic kidney disease, argininaemia, chunchington's disease, adilt polycystic kidney disease, alpha-1-

cuntirypsin deficiency, Duchenne muscular dystrophy, Marfan's syndrome, chuntington's disease, leber's hereditary optic neuropathy, MCAD, canavan's disease, retinitis pigmentosa, Bloom syndrome, Fanconi anaemia

cor Neimann Pick disease. The present sequence is one of the PCR primers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                          Detecting multiple genetic markers in one assay, useful to simultaneously detect a number of genetic disorders, comprises generating extension products and separating them on the basis of melting behavior is.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02; lve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 2 A; 12 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gene 216 SSCP sequencing primer SEQ ID NO 157.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 44; Page 35; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                919 TCATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВЪ.
                                                                                                                                                                                           99US-0165301P.
                                                                                                                                                  03-NOV-2000; 2000WO-US030493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3 rearcaccccrccrec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABZ72185 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-APR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 83.3%
                                                                                                                                                                                                                                                                                                Weisel JM;
                                                                                                                                                                                                                                (DUNL/) DUNLOP C L M. (WEIS/) WEISEL J M.
                                                                                                                                                                                                                                                                                                                                       WPI; 2001-329096/34.
                                                                 WO200134839-A1
                                                                                                                                                                                           12-NOV-1999;
                            Homo sapiens.
                                                                                                                                                                                                                                                                                                  Dunlop CLM,
                                                                                                          17-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABZ72185;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABZ72185,
```

```
The invention relates to isolated genes (Gene 216) from human chromosome 20p13-p12 and the proteins they encode. The nucleic acids and proteins may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate Gene 216 expression. For example, the nucleic acids (or vectors) and proteins may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of gene 216 by expressing inactive proteins or to supplement the patients own production of Gene inactive proteins. Additionally, the nucleic acids may be used to produce the secreted Gene 216 protein, by inserting the nucleic acids into a host complementary sequences may also be used as DNA probes in diagnostic conplementary sequences may also be used as DNA probes in diagnostic complementary sequences may also be used as DNA probes in need of complementary sequences may also be used as DNA probes in need of complementary sequences and anterfore which patients may be in need of confourtion of antibodies against Gene 216 and in assays to identify and antibodies against Gene 216 and in assays to identify and antagonists may also be used to down regulate expression and activity. The anti-Gene 216 antibodies may also be used as diagnostic against Gene 216 proteins in samples of the production of antibodies may also be used to down regulate expression and activity. The anti-Gene 216 antibodies may also be used as diagnosed and antagonists may also be used to down regulate expression confourtion. The primers are used in the physical mapping of the gene confourtion. The primers are used in the physical mapping of the gene confouration alpolymorphism (SSCP) analysis (ABZ72081-ABZ7288), conformational polymorphism indentification using single strand conformational polymorphism (SSCP) analysis (ABZ72011-ABZ7288)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; Gene 216; chromosome 20p13-p12; antiasthmatic; anorectic; antiinflammatory; gastrointestinal; gene therapy; vaccine; asthma; obesity; inflammatory bowel disease; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity 83.3%; Pred. No. 4.6e+02;
Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gene 216 SSCP sequencing primer SEQ ID NO 159.
Example 10; Page 150; 520pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGCCTCCACTTCTGAGGG 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABZ72187/c
ID ABZ72187 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCCTCTACTCCTGAGAG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABZ72187;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>۾</u>
```

ö

Human; Gene 216; chromosome 20p13-p12; antiasthmatic; anorectic; antiinflammatory; gastrointestinal; gene therapy; vaccine; asthma; obesity; inflammatory bowel disease; primer; ss.

Synthetic

à d

```
11-APR-2002 (first entry)
                                                                                                                               Best Local Similarity
Matches 15; Conserv
      WO200178894-A2.
           25-OCT-2001
  Synthetic.
                                                                                                                                           19
                                                                                                                                                           ABL45546;
                                                                                                                             Query Match
                              Keith T;
                                                                                                                                                  RESULT 256
                                                                                                                                                    ABL45546
à
                                                                                                                                          g
                                                                                                                                                       AX BX BX BX
```

The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. to array the multiwell close and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified broducts; (h) the clones in the multiwell creating are detected from the amplified products; (h) the clones in the multiwell care detected from the amplified products; (h) the clones in the multiwell care detected from the amplified products; (h) the clones in the multiwell care detected from the amplified products; (h) the clones in the multiwell care detected from the amplified products; (h) the clones in the multiwell care detected from the amplified products; (h) the clones are care detected from the amplified products; (h) the clones are care detected from the amplified products; (h) the clones are multiwell care detected from the amplified for the detected result; and (i) the clones are Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome; Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome; reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent PCR primers for human chromosome 1936-335 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention 4.6%; Score 13.2; DB 1; Length 20; 13.3%; Pred. No. 4.6e+02; ve 0; Mismatches 3; Indels Human chromosome 1p36-35 PCR primer SEQ ID NO:1210. Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other; Claim 6; Page 56; 528pp; Japanese. 785 CCCCTCTGGTGCCAAGAG 802 10-MAR-2000; 2000JP-00066716. ABL44166 standard; DNA; 20 BP 12-MAR-2001; 2001JP-00068285. 83.3%; CACCTTTGTTGCCAAGAG (RIKA ) RIKAGAKU KENKYUSHO. (GENO-) GENOTEX YG. (first entry) 15; Conservative Arraying genome clones. WPI; 2002-144136/19. Local Similarity PCR primer; ss. JP2001321190-A Homo sapiens. 11-APR-2002 20-NOV-2001 ABL44166; RESULT 257 Matches ABL44166 ð The invention character of the proteins they encode. The nucleic acids and proteins associated with inappropriate Gene 216 expression. For example, the nucleic acids (or vectors) and proteins may be used to treat disorders associated with inappropriate Gene 216 expression. For example, the nucleic acids (or vectors) and proteins may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of gene 216 by expressing inactive proteins or to supplement the patients own production of Gene secreted Gene 216 protein, the nucleic acids may be used to produce the secreted Gene 216 protein, the nucleic acids may be used to produce the secreted Gene 216 protein, the patients of similar nucleic acids and culturing the cell to express the protein. The nucleic acids and complementary sequences may also be used as DNA probes in diagnostic complementary sequences may also be used as DNA probes in diagnostic complementary sequences and quantitate the presence of similar nucleic acid sequences in samples and therefore which patients may be used as antigens in capturing therefore which patients may be used as antigens in modulators of Gene 216 protein may also be used as antigens in modulators of Gene 216 protein may also be used as diagnostic and antagonists may also be used to down regulate expression and activity. The anti-Gene 216 antibodies may also be used as diagnostic agents for detecting the presence of Gene 216 proteins in samples (e.g. by enzyme linked immunosorbant assays to EliSA). Disorders that may be revented diagnosed and/or treated by the above methods include, for example asthma, obesity and inflammatory bowel disease. The present sequence is that of a Gene 216 related primer used in examples of the invention. The primers are used in the physical mapping of the gene (ABZ72067-ABZ72088), polymorphism identification using single strand conformational polymorphism (SSCE) and absorbance of the protein protein and generating ( ö Isolated genes (Gene 216) from human chromosome 20p13-p12 and the proteins they encode, useful for the prevention, diagnosis and treatment of asthma, obesity and inflammatory bowel disease. The invention relates to isolated genes (Gene 216) from human chromosome Gaps . 0 4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02; ve 0; Mismatches 3; Indels 3; Indels Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other; Example 10; Page 150; 520pp; English, (GENO-) GENOME THERAPEUTICS CORP. 764 GGCCTCCACTTCTGAGGG 781 ~ 13-APR-2001; 2001WO-US012245. ABL45546 standard; DNA; 20 BP 13-APR-2000; 2000US-00548797 83.3%; GGCCTCTACTCCTGAGAG Conservative WPI; 2001-639428/73

ó

Gaps

; 0

JP2001321190-A.

Human chromosome 21q22.1 PCR primer SEQ ID NO:2590.

20-NOV-2001.

Homo sapiens.

PCR primer; ss.

```
The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in method comprises: (b) a primer designed based on the chromosome marker multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the maximum in the specified discrimination Nos. to array the multiwell content which nos. are mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the crenttent cultures are amplified by using the above primer; (g) signals are detected from the amplified by using the above primer; (g) signals are detected from the amplified by using the above primer; (g) signals are detected from the amplified by using the above primer; (g) signals are specified from the amplified products; (h) the clones are reconstituted as the positions on the chromosome and arrayed. The crones are reconstituted as the positions on the chromosome and arrayed. The mixed primers for human chromosome 1262.1, which are present programmers for human thromosome 21q22.1, which are present programmers in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 9 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                 Claim 4; Page 28; 528pp; Japanese.
                       12-MAR-2001; 2001JP-00068285
                                                                   10-MAR-2000; 2000JP-00066716
                                                                                                                  (RIKA ) RIKAGAKU KENKYUSHO.
(GENO-) GENOTEX YG.
                                                                                                                                                                                                                                                  Arraying genome clones.
                                                                                                                                                                                                 WPI; 2002-144136/19.
```

0 Gaps .. 4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02; 3; Indels 0; Mismatches 949 GCAAGAGAGCCAAATTG 966 83.3%; Best Local Similarity 83.3 Matches 15; Conservative Query Match à

GCAACAAGAGCAAAACTG 20

ABK89164 standard; DNA; 20 BP (first entry) 21-OCT-2002 ABK89164; 

Human jAZF1 PCR primer 7SenseOuter.

Human; jAZF1; juxtaposed with another zinc finger; jjAZ1; jAZF1/jjAZ1; joined with jAZF1; proliferation; endometrial stroma tumour; immunogen; antigen; antibody; fertility; pregnancy; gene therapy; vaccine; PCR; primer; ss.

Homo sapiens

WO200193805-A2.

13-DEC-2001

04-JUN-2001; 2001WO-US017936

02-JUN-2000; 2000US-0209093P

(BGHM ) BRIGHAM & WOMENS HOSPITAL INC.

Koontz J, 

WPI; 2002-575047/61

Novel jAZF1, jjAZ1 or jAZF1/jjAZ1 polypeptides useful as immunogens or antigens to raise or test anti-jAZF1, jjAZ1 or jAZF1/jjAZ1 antibodies.

Example 8; Page 58; 76pp; English.

The present invention relates to a new jAZPI (juxtaposed with another zinc finger), jjAZI (joined with jAZPI) or jAZFI/jjAZI polypeptide. The methods of the invention can be used to identify a compound which controls proliferation of endometrial stroma, by expressing jjAZ in the compound, and determining whether the compound affects expression of jjAZ. jAZPI, jjAZI or jAZFI/jjAZI polypeptides are useful as immunogens or attignes to raise or test anti-jAZPI, jjAZI or jAZFI/jjAZI antibodies. The invention can be used as bait proteins in a two hybrid assay or three hybrid assay to identify other proteins which bind or interact with jAZPI/jjAZI-binding proteins. JAZFI, jjAZI or jAZFI/jjAZI molecules are useful for identifying the origin of tumour and as tumour marker protein to verify that a stromal tumour is from conformer and late of the interact with jAZPI/jjAZI should not interact with jAZPI/jjAZI-binding proteins. JAZFI, jjAZI or jaZPI/jjAZI conformatility as the or interact with jAZPI/jjAZI-binding proteins. JAZFI/jjAZI or jaZPI/jjAZI and also for treating endometrial stromal tumours. The conformation or pregnancy, and also for treating endometrial stromal tumours. The conformation or pregnancy and also for treating endometrial stromal tumours. The conformation or pregnancy and also for treating endometrial stromal tumours. The conformation or pregnancy and also for treating endometrial stromal tumours. The conformation or pregnancy and also for treating endometrial stromal tumours. The conformation or pregnancy and also for treating endometrial stromal tumours. present nucleic acid sequence represents a PCR primer that was used in the methods of the invention for amplification of the human jAZF1 gene located on chromosome 7

Sequence 20 BP; 6 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Gaps 0; 4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02; ive 0; Mismatches 3; Indels 83.3%; 15; Conservative Local Similarity Query Match Matches

·.

763 AGGCCTCCACTTCTGAGG 780 18 AGGCTTCCACTGCTGTGG ð g

ABT06146 standard; DNA; 20 (first entry) 28-OCT-2002 ABT06146; RESULT 259 ABT06146/ 

BP.

Human light chain lambda gene related oligo SEQ ID No 160.

Single Primer Amplification; nested oligonucleotide extension reaction; hairpin; SPA; library; ds.

Homo sapiens

WO200248401-A2.

20-JUN-2002.

10-DEC-2001; 2001WO-US047727.

11-DEC-2000; 2000US-0254669P. 19-SEP-2001; 2001US-0323400P.

(ALEX-) ALEXION PHARM INC

Mcwhirter J, Lin Y, Barbas-Frederickson S, Bowdish KS,

WPI; 2002-500537/53.

Amplifying nucleic acid by synthesizing template nucleic acid containing a predetermined sequence and hairpin structure and using the template for target amplification by Single Primer Amplification.

 $\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}{\mathbf{x}}\overset{\circ}$ 

Example 6; Page 35; 54pp; English.

Single Primer Amplification (SPA). The method comprises synthesising a template nucleic acid containing a predetermined sequence and hairpin structure with the neeted oligonuclectide extension reaction. The method is useful for amplifying a nucleic acid, preferably for amplifying a family of related nucleic acid sequences to build a complex library of polypoptides encoded by the sequences. The engineered nucleic acid strand by providing a nucleic acid with a predetermined sequence engineered nucleic acid strand of structure between them and contacting the engineered nucleic acid strand structure between them and contacting the engineered nucleic acid strand with a primer containing at least a portion of the predetermined sequence and a hairpin structure between them and contacting the presence of a polymerase and nucleotides under conditions suitable for polymerisation to produce a complementary nucleic acid strand. The method of the invention is useful for producing large amounts of a target nucleic acid sequence and for amplifying simultaneously more than one different target nucleic acid sequence containing to the invention of polymucleotide sequence represents an oligonucleotide relating to the invention relates to a method for amplifying a nucleic acid using invention

Sequence 20 BP; 2 A; 8 C; 7 G; 3 T; 0 U; 0 Other;

Score 13.2; DB 1; Length 20; Pred. No. 4.6e+02; 0; Mismatches 3; Indels 849 ACAGCGTCCTGGCTCCAG 866 ·, 18 ACAGGGTCCTGGGCCCAG 1 4.6%; Conservative Local Similarity nes 15; Conserv Query Match Matches ð g

0;

Gaps

. 0

AAD27872 standard; DNA; 20 

AAD27872;

21-MAY-2002 (first entry)

Rattus norvegicus CRF2 receptor mRNA antisense oligonucleotide #3.

Corticotropin releasing factor; CRF2 receptor; psychiatric disorder; anxiety; obsessive-compulsive disorder; phobia; depression; epilepsy; panic disorder; post-traumatic stress disorder; trauma; stroke; ischaemic neuronal damage; cerebral hippocampal ischaemia; excitotoxic neuronal damage; immune dysfunction; muscular spasm; Parkinson's disease; Huntington's disease; urinary incontinence; dementia; amyotrophic lateral sclerosis; addiction; alcohol; cocaine; hypoglycaemia; gene therapy; antisense; rat; ss.

Rattus

WO200205749-A2.

24-JAN-2002

19-JUL-2001; 2001WO-US022808

19-JUL-2000; 2000US-0219391P.

(DUPO ) DUPONT PHARM CO

Ho SP;

WPI; 2002-206002/26.

Treating a disorder associated with corticotropin releasing factors, e.g. psychiatric disorders, involves administering CRF1 and CRF2 receptor ligands or CRF1 receptor ligand and CRF2 antisense oligonucleotide.

```
method involves administering CRF1 and CRF2 receptor activities. The method involves administering CRF1 and CRF2 receptor ligands, or CRF1 creeptor ligand and CRF2 antisense oligomucleotides. The antisense oligomucleotide is composed of chimeric sequences, where 10-70% of the 2, oligomucleotide phosphorothicate residues are replaced with modified mucleotide residues. The invention is useful for treating psychiatric disorders e.g. anxiety, obsessive-compulsive disorder, panic disorder, post-traumatic stress disorder, phobia and other disorders including head trauma, spinal cord trauma, ischeemic neuronal camage (e.g. cerebral ischaemia such as cerebral hippocampal ischaemia), excitotoxic neuronal damage, epilepsy, stroke, stress induced immune dysfunctions, phobias, muscular spasms, Parkinson's disease, Huntington's disease, urinary incontinence, senile dementia of the Alzheimer's type, multiinfarct dementia, amyotrophic lateral sclaerosis, chemical capendencies and addictions (e.g. dependencies on alcohol, cocaine, heroin, benzodiazepines, or other drugs, and hypoglycaemia. The present content mann.
                                                The invention relates to a method of treating disorders associated with
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 13.2; DB 1; Length 20; Pred. No. 4.6e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 0 C; 11 G; 4 T; 0 U; 0 Other;
Claim 10; Page 36; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 rcarcaccaccrrcarcc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           919 TCATCACCACCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 83.3
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            receptor mRNA
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
```

..

Human, antisense, lung dysfunction, nasal airway dysfunction, antiinflammatory steroid, ubiquinone, antiinflammatory, antiallergic, antiasthmatic, pypotensive, immunosuppressive, cytostatic, gene therapy, antisense gene therapy, respiratory, lung, adenosine sensitivity, adenosine receptor, bronchodilation, bronchoconstriction; lung allergy, Human oligonucleotide sequence. ВР ABZ91957 standard; DNA; 20 (first entry) 17-0CT-2003 ABZ91957; ABZ91957 

WO200285308-A2 Homo sapiens

lung inflammation; respiratory disease; ds

23-APR-2002; 2002WO-US013135. 31-OCT-2002.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC

Pabalan J, Aguilar D; Katz E, Shahabuddin S; Sandrasagra A, Li Y, Sar, Tang L, Nyce JW, 1 Miller S,

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or

Disclosure; SEQ ID NO 7199; 872pp; English.

```
X05555555555555555555555555555
```

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation coodon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an entitliflammatory steroid and ubiquinome. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing or depleting levels of, or reducing sensitivity to adenosine, reducing levels of in a control of the composition in a subject, for reducing levels of in a control of the composition in a control of the composition in a control of the composition of the composition of the composition of the composition in a subject, for reducing levels of an entitle control of the composition of the composit lung surfactant in a subject's tissue, or treating bronchoconstriction, uninflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO ftp.wipo.int/pub/published pct_sequences

Sequence 20 BP; 2 A; 4 C; 4 G; 10 T; 0 U; 0 Other;

Gaps . 0 4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02; 3; Indels 0; Mismatches 854 GTCCTGGCTCCAGTTGGA 871 drerrererekarifeda 19 Best Local Similarity 83.3 Matches 15; Conservative 2 Query Match à

·;

Human oligonucleotide sequence. ABZ89510 standard; DNA; 20 BP. (first entry) 17-0CT-2003 ABZ89510; RESULT 262 ABZ89510/c 

Human, antisense; lung dysfunction; nasal airway dysfunction, antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2.

31-OCT-2002

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC.

Pabalan J, Aguilar D; Katz E, Li Y, Sandrasagra A, Ka Tang L, Shahabuddin S; Li Y, Miller S, Nyce JW,

WPI; 2003-229219/22

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone

Disclosure; SEQ ID NO 4752; 872pp; English.

first active agent comprising an oligonuclectide antisense to the intriation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an entinflammatory steroid and ubiquinone. A composition of the invention has antisense gene therapy. The composition of the invention care in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an entilinflammatory steroid in a subject, for reducing levels of or reducing sensitivity to adenosine, reducing levels of adenosine creeptor, producing bronchodilation, increasing levels of depiction, controlling surfactant in a subject stissue, or treating bronchodilation, increasing levels of depiction, lung allergies, or a respiratory disease or condition, or lung inflammation, but was obtained in electronic format directly from WIPO after all or the printed in the printed or th invention relates to a novel pharmaceutical composition, which has a ftp.wipo.int/pub/published_pct_sequences 

Sequence 20 BP; 8 A; 1 C; 4 G; 7 T; 0 U; 0 Other;

Gaps . Score 13.2; DB 1; Length 20; Pred. No. 4.6e+02; 3; Indels 0; Mismatches 4.6%; 15; Conservative Local Similarity Query Match Matches

ö

961 AAATTGACTCTCTAAATC 978 20 AAATTAACTCTCTTGATC 3 셤 ð

ABZ98436 standard; DNA; 20 BP ABZ98436; RESULT 263 ABZ98436, 

(first entry) 17-0CT-2003 Human ICAM oligonucleotide sequence.

Human, antisense; lung dysfunction, nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiathmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

Homo sapiens.

WO200285308-A2

31-OCT-2002.

23-APR-2002; 2002WO-US013135.

24-APR-2001; 2001US-0286137P.

(EPIG-) EPIGENESIS PHARM INC.

Aguilar D; Pabalan J, Katz E, ŝ Li Y, Sandrasagra A, Tang L, Shahabuddin Nyce JW, 1 Miller S,

WPI; 2003-229219/22.

Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or ubiquinone

Disclosure, SEQ ID NO 13678, 872pp, English.

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' incron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or neasal arrway dysfunction and a second active agent comprising an entinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also antiinflammatory steroid in a subject, for reducing of depleting levels of cor enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing levels of adenosine lung surfactant in a subject, stissue, or treating bronchoconstriction, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from MIPO at ftp.wipo.int/pub/published_pct_sequences

4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02; ive 0; Mismatches 3; Indels Sequence 20 BP; 7 A; 4 C; 3 G; 6 T; 0 U; 0 Other; Local Similarity 83.3 Query Match

.. 0

Gaps

; 0

910 ATCAGATTATCATCACCA 927 ATGAGATTGTCATCATCA 18 Best Loca Matches ð g

ADA66486 standard; DNA; 20 BP 20-NOV-2003 ADA66486; ADA66486 

(first entry)

Transforming growth factor-beta 3 antisense oligonucleotide, SEQ ID

Cytostatic; antirheumatic; antiarthritic; gynecological; antiarteriosclerotic; Transforming Growth Factor beta-3; TGF beta-3 hyperproliferative disorder; cancers; atherosclerosis; rheumatoid arthritis; preeclampsia; fibrosis; phosphorothioate; ss.

Synthetic.

Location/Qualifiers modified base

/note= "This oligonucleotide has a phosphorothioate backbone and 2-"methyoxyethyl (2-MDE) wings at the 5' and 3' ends, which are 5 nucleotides in length. Also all cytidine residues are 5-methylcytidines" /mod_base= OTHER ď 1. .zv /*tag=

WO2003008544-A2

30-JAN-2003

12-JUL-2002; 2002WO-US022423 14-JUL-2001; 2001US-00906158

(ISIS-) ISIS PHARM INC

Monia BP, Freier SM;

WPI; 2003-229569/22

ö

Gaps

.. 0

Query Match
4.6%; Score 13.2; DB 1; Length 20;
Best Local Similarity 83.3%; Pred. No. 4.6e+02;
Matches 15; Conservative 0; Mismatches 3; Indels

Sequence 20 BP; 6 A; 1 C; 10 G; 3 T; 0 U; 0 Other;

```
ö
                                                                                                                              ADA66609), which inhibit Transforming Growth Factor (TGF) beta-3 expression. The oligonucleotides are useful for inhibiting the expression of TGF-beta3 in cells or tissues, and for treating an animal having a disease condition associated with TGF-beta3, e.g. a hyperproliferative disorder such as cancers of lung, liver, colon, oesophagus, pancreas, breast, skin or haematopoietic, atherosclerosis, rheumatoid arthritis,
Novel antisense compound which is targeted to nucleic acid encoding transforming growth factor beta-3, and inhibits expression of TGF-beta 3, useful for treating a condition associated with TGF-beta 3, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Quantitative determination and identification of bacterial strain with quantitative determination of nucleic acid dependent PCR cycle number and intensity of fluorescence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention relates to a method for the quantitative determination of bacterial count. The method comprises real time quantitative PCR amplification of DNA derived from bacteria and function (regression equation) obtained from an experimental working curve. The method is also useful for identification of cell strain. The present sequence is a PCR primer, which was used in the method of the invention. Note: The present sequence is the SEQ ID 1 shown in the disclosure of the specification. This sequence differs from that shown in
                                                                                                              present invention relates to antisense oligonucleotides (ADA66459-
                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primer #1 for quantitative determination of bacterial count.
                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR; primer; quantitative; bacterial count; identification; ss.
                                                                                                                                                                                                                                                                                                               Score 13.2; DB 1; Length 20;
Pred. No. 4.6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                             Sequence 20 BP; 5 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           the sequence listing (see ABQ80958)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 3; 6pp; Japanese.
                                                                      Claim 3; Page 87; 154pp; English.
                                                                                                                                                                                                                                                                                                                                                                                          851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABQ80956 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-FEB-2001; 2001JP-00091376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-FEB-2001; 2001JP-00091376.
                                                                                                                                                                                                                                                                                                                                                                                                                          3 rrrrcrccacrcacaca
                                                                                                                                                                                                                                                                                                                     4.6%;
                                                                                                                                                                                                                                                                                                                                  83.3%;
                                                                                                                                                                                                                                                                                                                                                                                          834 TITICITCTCTGAAGACA
                                                                                                                                                                                                                                          preeclampsia and fibrosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                              Local Similaricy
hes 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-003954/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (OSHI/) OSHIMA J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JP2002238585-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-AUG-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABQ80956;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 265
                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABQ80956/
 Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ⋧
```

921 ATCACCACCACCTCCAG 938

ð g

20 Arccccaccrrccrccag 3

```
Zhong M, Catterton E;
a CEA, Shenoy SG;
ML, Berghs C, Dipippo VA;
                                                                                                                     immunomodulator; cytostatic; motropic; neuroprotective;
antiparkinsonian; antilipaemic; gene therapy; human disease;
metabolic disorder; diabetes; obesity; infection; cachexia; cancer;
neurodegenerative disorder; Alzhea, mer's disease; Parkinson's disease;
immune disorder; haematopoletic disorder; dyslipidaemia; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Smithson G, Millet I, Peyman JA, Kekuda R, Ju J, Li L, Guo X, Patturajan M, Spytek KA, Edinger SR, Ellerman K, Malyankar UM, Ort T, Gorman L, Zerhusen BD, Anderson DW, Zhong M, Catterton E, Ji W, Miller CE, Rastelli L, Stone DJ, Pena CEA, Shenoy SG; Shinkets RA, Rothenberg ME, Leach MD, Agee ML, Berghs C, Dipippo Eisen AJ, Gangolli EA, Rieger DK, Spaderna SK;
                                                                                                           human; NOVX; antidiabetic; anorectic; antibacterial; virucide;
                                                                                    Human NOVX forward PCR primer SEQ ID NO:333.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001US-0349575P.
2001US-0346357P.
2002US-0373260P.
2002US-0373815P.
2002US-0373817P.
                                                                                                                                                                                                                                                                                                                                      200105 - 0327449P
200105 - 0327917P
200105 - 0328024P
200105 - 0328064P
200105 - 0328064P
200105 - 0328044P
200105 - 0328444P
200105 - 03304142P
200105 - 0330309P
200105 - 0330309P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2002US-0373826P.
2002US-0373884P.
2002US-0374977P.
2002US-0381037P.
2002US-0381038P.
          ADA05973 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001US-0339266P.
2001US-0343629P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0383656P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002US-0383831P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-00262511
                                                                                                                                                                                                                                                                                        02-OCT-2002; 2002WO-US031373
                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-381626/36.
                                                                                                                                                                                                                                        WO2003029424-A2.
                                                                                                                                                                                                                                                                                                                                                    09-0CT-2001;
09-0CT-2001;
09-0CT-2001;
09-0CT-2001;
12-0CT-2001;
15-0CT-2001;
14-0CT-2001;
18-0CT-2001;
22-0CT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-APR-2002
16-MAY-2002
16-MAY-2002
16-MAY-2002
17-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-APR-2002;
19-APR-2002;
19-APR-2002;
                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                 02-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-OCT-2001;
24-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-OCT-2001;
01-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-APR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-2002;
                                                                                                                                                                                                                                                                                                                                         05-OCT-2001;
                                                           06-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        19-APR-2002
                                                                                                                                                                                                                                                                 10-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-MAY-2002
                                                                                                                                                                                                  Synthetic
                                   ADA05973;
ADA05973/c
```

obesity, The present invention describes NOVX proteins, where X can be 1 to 55 New NOVX polypeptides and nucleic acids, useful for diagnosing, preventing or treating NOVX-associated disorders, e.g. diabetes, obtoancer or dyslipidemia, and in chromosome mapping, tissue typing or Example C; Page 411; 586pp; English. pharmacogenomics.

The present invention describes NOWX proteins, where X can be 1 to 55 described above and a carrier; (2) a kit comprising a polypeptide described above and a carrier; (2) a kit comprising, in one or more containers, the composition described above; (3) an isolated nucleic acid containers, the composition described above; (5) a cell comprising the nucleic acid molecule described above; (5) a cell comprising the nucleic acid molecule described above; (5) a cell comprising the above vector; (6) an antibody that immunospecifically comprising the above vector; (6) an antibody that immunospecifically comprising the above polypeptide door in the above polypeptide described above; (7) methods for determining the presence of or predisposition to a sample; (8) methods for aderermining the presence of or predisposition to a calisace associated with altered levels of expression of the above polypeptide comprehence of identifying an agent that binds to the polypeptide described above; (10) a method for identifying a potential therapeutic agent for use in treating a pathology that is related to an aberrant expression or aberrant physiological interactions of the polypeptide; (12) a method of carefully of the polypeptide; (12) a method of carefully of the polypeptide above; (13) methods of treating carefully of the polypeptide above; (13) methods of treating carefully of the polypeptide above; (13) methods of treating carefully in antidabetic, anorectic, antipatential, virucide, and an be used in gene therapy. The polypeptide is useful in manufacturing a medicament for treating a syndrome associated with a human disease. The polypeptide or prevent metabolic and can be used in gene therapy. The polypeptide is useful in manufacturing a medicament for treating a syndrome associated with a human disease. The polypeptide or prevent metabolic disorders such as diabetes or obesity, infections, cacked and antipapent or obesity, infections, cacked and antipapent or obesity, infections, cacked and antipapent or obesity, infections, cac pharmacogenomics. The present sequence represents a PCR primer for a human NOVX sequence, which is used in an example from the present 

Sequence 20 BP; 4 A; 4 C; 6 G; 6 T; 0 U; 0 Other;

Gaps . 0 4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02; Live 0; Mismatches 3; Indels 15; Conservative Best Local Similarity Query Match Matches

0

TTCTGAGGGCAGCCCCTC 790 Trcrgaaggcagcarc 773 δ

ABX12839 standard; DNA; 20 (first entry) 10-MAY-2003 ABX12839; 18 RESULT 267 ABX12839, g

BP.

PCR primer, CMV_381F, used to detect transgene insertion.

PCR; primer; ss; CMV; bradykinin B l receptor; hBl; transgenic; humanised B l bradykinin receptor; receptor modulator; pharmacodynamic; G-protein coupled receptor; GPCR; transgene.

Cytomegalovirus.

WO2003016495-A2

The invention discloses a non-human transgenic animal having incorporated into its genome at least one copy of a transgene encoding a primate bradykinin B 1 receptor gene, or its functional equivalent, such that the transgenic animal demonstrates a humanised B 1 bradykinin receptor (hB1) occupancy or binding profile. The transgenic animal, preferably receptor modulators as well as providing a system for the assessment of the pharmacodynamic properties of B 1 bradykinin receptor modulators of But bradykinin receptor modulators. Such as antagonists or agonists of receptor activity. The B2 and B1 bradykinin receptors are members of the superfamily of 6-protein coupled bradykinin receptors are members of the superfamily of 6-protein coupled bradykinin receptors are members of the superfamily of 6-protein coupled bradykinin receptors are members of the superfamily of 6-protein coupled bradykinin receptors are members of the superfamily of 6-protein coupled bradykinin receptors are members of the superfamily of 6-protein coupled bradykinin receptors are members of the superfamily of 6-protein coupled bradykinin braceptors are members of the superfamily of 6-protein coupled bradykinin braceptors are members of the superfamily of 6-protein coupled bradykinin braceptors are members of the superfamily of 6-protein coupled bradykining the superfamily of 6-protein coupled bradykinin receptors (GPCR). The sequence presented is a PCR primer, CMV 381F, which was used to detect transgene insertion during creation of a transgenic New non-human transgenic animal, useful as a specific receptor occupancy model for modulators of the B1 bradykinin receptor, or as an animal mode. system for assessing the pharmacodynamic properties of B1 bradykinin Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other; Gould RJ, Pettibone DJ; Example 2; Page 24; 66pp; English. 19-AUG-2002; 2002WO-US026368. 20-AUG-2001; 2001US-0313531P. (MERI ) MERCK & CO INC WPI; 2003-278563/27 27-FEB-2003. Hess JW,

Gaps °; 4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02; ative 0; Mismatches 3; Indels 3; Indels Query Match
Best Local Similarity 83.33
Matches 15; Conservative

GGAACACTTTCCTGAGAT 886 GGAACACGTACCCGAGAT 869 19 ð g

ABX12841 standard; DNA; 20 (first entry) 10-MAY-2003 ABX12841; RESULT 268 ABX12841/c 

PCR primer, #1, used to map the transgene integration site.

PCR; primer, ss; bradykinin B 1 receptor; hB1; transgenic; humanised B_1 bradykinin receptor; receptor modulator; pharmacodynamic; G-protein coupled receptor; GPCR; transgene.

Unidentified

WO2003016495-A2

27-FEB-2003,

19-AUG-2002; 2002WO-US026368

20-AUG-2001; 2001US-0313531P

(MERI ) MERCK & CO INC.

Gould RJ, Pettibone DJ; Hess JW,

WPI; 2003-278563/27

New non-human transgenic animal, useful as a specific receptor occupancy model for modulators of the B1 bradykinin receptor, or as an animal mode system for assessing the pharmacodynamic properties of B1 bradykinin

Example 4; Page 27; 66pp; English.

The invention discloses a non-human transgenic animal having incorporated bradyknin bal receptor gene, or its functional equivalent, such that the transgenic animal demonstrates a humanised B l bradykinin receptor (hB1) occupancy or binding profile. The transgenic animal, preferably reassenic rat, can also be used for the discovery of B l bradykinin receptor captor an also be used for the discovery of B l bradykinin treceptor modulators as well as providing a system for the assessment of the pharmacodynamic properties of B l bradykinin receptor modulators. But an agonists of receptor activity. The B2 and B1 bradykinin receptors are members of the superfamily of G-protein coupled receptors (GPCR). The sequence presented is a PCR primer, #!, which was also and any activity and account of the superfamily of G-protein coupled the demonstration of the during and any activity and account of the during and any account of the during any account of the during any account of the during and any account of the during creation of a transgenic rat

Sequence 20 BP; 3 A; 5 C; 6 G; 6 T; 0 U; 0 Other;

Gaps 0; 4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02; ive 0; Mismatches 3; Indels 15; Conservative Local Similarity Query Match Matches

0;

886 869 GGAACACTTTCCTGAGAT 19 GGACACGTACCCGAGAT

g

ò

AAD50222 standard; DNA; 20 RESULT 269 AAD50222 HARAMA KARAKA KA

ö

BP.

(first entry) 24-MAR-2003 AAD50222;

Human GALT 5 specific PCR primer #2.

Human; cystic fibrosis; Tay-sachs; familial hypercholesterolaemia; FH; fragile X syndrome; haemophilia A; diabetes; cystinuria; tyrosinaemia; urea cycle disorder; hereditary fructose into-ferance; Baker's disease; Wilson's disease; alcaptonuria; adult polycystic kidney disease; MCAD; Huntington's disease; myotonic dystrophy; retinitis pigmentosa; cancer; Gauchers disease; Canavan's disease; galactosaemia; thrombocytopaenia; thalassaemia; sickle cell disease; phenylketonuria; Marfan's syndrome; haemoglobinopathy; Bloom syndrome; Neimann Pick's disease; PCR; primer; galactose-1-phosphate uridyl transferase; GALT; ss.

Homo sapiens.

WO200290374-A1.

14-NOV-2002.

06-MAY-2002; 2002WO-US014562.

38-MAY-2001; 2001US-00851501.

(AMBR-) AMBRY GENETICS CORP.

Dunlop CLM, Weisel JM;

WPI; 2003-103498/09.

Identifying the presence or absence of a mutation or polymorphism in a subject, useful for diagnosing genetic diseases, comprises generating extension products and analyzing the melting behavior of the mixed DNA

```
The Invention relates to a method to its interior of a mutation or polymorphism in a subject for identifying the presence or absence of a mutation or polymorphism in a subject for diagnosing genetic diseases, e.g. cystic fibrosis, Tay-sachs, can be presence or absence of several genetic markers in a subject for diagnosing genetic diseases, e.g. cystic fibrosis, Tay-sachs, familial hypercholesterolaemia (FH), thalassaemia, sickle cell disease, phenylkerouria, galactoseemia, fragile X syndrome, haemophilia A, myotonic dystrophy, medium-chain acyl CoA dehydrogenase, maturity onset diabetes, cystinuria, methylmolonic acidaemia, urea cycle disease, chrembocytopaenia, Gauchers disease, tyrosinaemia adenomatous chrembocytopaenia, dauchers disease, tyrosinaemia adenomatous colypopis coli (APC), adult polycytic kidney disease, buchenne muscular dystrophy, alpha-1-antitrypsin deficiency, hereditary non-polyposis coleccal cancer, Huntington's disease, neurofibromatosis, Marfau's coleccal cancer, entitity psin deficiency, nerofibrome, osteogenesis imperfecta, retinoblastoma, Freidrich's ataxia, chaemoglobinopathies, MCAD, Canavan's disease, Leber's hereditary optic neuropathy, retinitis pigmentosa, Bloom syndrome, Franchie anaemia, or phosphate uridyl transferase (GALT) specific PCR primer used to
                                                                                         The invention relates to a method for identifying the presence or absence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 20 BP; 2 A; 12 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                            Claim 56; Page 45; 49pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         919 TCATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rcarcaccccrcccrcc 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-AUG-2001; 2001US-0312834P.
16-AUG-2002; 2002US-00312834.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-AUG-2002; 2002WO-US026285.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               83.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC55362 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-JUN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity 83.3
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003016492-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC55362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 270
ŏ
```

ö

Gaps

0

Indels

3;

```
Human; thrombotic thrombocytopenic purpura; TTP; disintegrin; metalloproteinase; thrombospondin 1-like domains 13; ADAMIS13; thrombolytic; haemostatic; PCR; primer; RT-PCR; 5' RACE; 3' RACE; ss.
                                                                                                                                                                                                                                                                                                   Identifying risk of developing thrombotic thrombocytopenic purpura disease, using a novel disintegrin and metalloproteinase containing thrombospondin 1-like domains genes and proteases.
                                                          Human ADAMTS13 exon 15 reverse PCR primer.
                                                                                                                                                                                                                                                              Tsai
                                                                                                                                                                                                                                        (UNMI ) UNIV MICHIGAN.
                                                                                                                                                                                                                                                             Levy G,
                                                                                                                                                                                                                                                                                  WPI; 2003-268318/26.
                                                                                                                                                                                                                                                              Ginsburg D,
```

```
ö
                                                                                                                                                  one or more
The invention relates to a novel method for identifying subjects at risk of developing thrombotic thrombocytopenic purpura (TTP) disease, comprising providing nucleic acid having a disintegrin and metalloproteinase containing thrombospondin 1-like domains 13 (ADAMTS13) gene from a subject, and detecting the presence or absence of one or wariations in the ADAMTS13 gene. The method of the invention has thrombolytic and haemostatic activity. The methods and compositions of the present invention are useful for the diagnosis and treatment of, and/or analyaing risks for thrombocit thrombocytopenic purpura. The present sequence is used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Indels
                                                                                                                                                                                                                                                                                                                                                                      Sequence 20 BP; 5 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 13.2; DB 1;
Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                           4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 83.33
Matches 15, Conservative
```

555555555555**X**8

Mouse Interleukin 5 receptor antisense oligonucleotide ISIS 16938. 900 BP. 18 AGATGCCCTCACTTCTGA 1 883 AGAIGCACTIACTICICA ABX04394 standard; DNA; 20 (first entry) 13-JAN-2003 ABX04394; RESULT 271 ABX04394 8

Mouse, ss, antisense, interleukin 5, IL-5, IL-5 receptor, antiasthmatic, immunosuppressant, eosinophilic syndrome, asthma. 26-MAR-1999; 99US-00280799. 17-MAR-2000; 2000WO-US007318. 07-MAR-2001; 2001US-00800629 (DEAN/) DEAN N M. (KARR/) KARRAS J G. US2002128216-A1. Mus musculus, 12-SEP-2002. 

Manoharan M; Mckay R, Dean NM, Karras JG, WPI; 2003-039602/03.

MCKAY R. MANOHARAN M.

(MCKA/)
(MANO/)

Novel antisense compound for treating disease/condition e.g. eosinophilic syndrome or asthma associated with interleukin-5 or IL-5 receptor expression or IL-5 signal transduction, modulates IL-5 signal ransduction.

Example 23; Page 22; 77pp; English.

The invention relates to an antisense compound of 8-30 nucleobases in length, which modulates interleukin (IL)-5 signal transduction. Also include are a pharmaceutical composition comprising the antisense oligonuclectide and a pharmaceutically acceptable carrier or diluent, and a diagnostic kit for detecting the expression level of the membrane form wersus soluble form of IL-5 receptor a. The antisense compound is useful for modulating IL-5 signal transduction, modulating expression of mammalian IL-5 or modulating the expression of mammalian stiesuses, for altering the ratio of the isoforms of mammalian IL-5 receptor a in mammalian cells or tissues, treating a mammalian having a disease or condition associated with IL-5 signal transduction,

Example 1; Page 89; 96pp; English

sequence represents a gene 216 specific PCR primer used in the

or

for chromosome and gene mapping,

present

for tissue distribution studies.

```
condition include eosinophilic syndrome or asthma. An antisense compound which alters splicing of an RNA encoding IL-5 receptor a is also useful for treating a mammal having a disease or condition. The present sequence is an antisense oligonucleotide targetting mouse IL-5 receptor
     expression, where the disease or
expression or IL-5 receptor a
  88888888
```

Sequence 20 BP; 5 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

```
Gaps
                              .
0
  DB 1; Length 20;
                           3; Indels
Score 13.2; DB 1;
Pred. No. 4.6e+02;
0; Mismatches 3
                                                    801 AGCICTCCTCCAACTCAG 818
  4.68;
            83.3%;
Query Match
Best Local Similarity 83.3
Matches 15; Conservative
                                                    ö
```

ö

BP. 3 AGCTGGCCTCGAACTCAG ABX75038 standard; DNA; 20 RESULT 272 g

ABX75038; ABX75038/c 

Human gene 216 polymorphism detection PCR primer #95. 25-MAR-2003 (first entry)

Human; mouse; ss; primer; gene 216; antiasthmatic; antiinflammatory; anorectic; chromosome 20pl3-p12; single nucleotide polymorphism; SNP; gene therapy; respiratory disease; asthma; obesity; PCR; bronchial hyper-responsiveness; chronic obstructive pulmonary disease; adult respiratory distress syndrome; inflammatory bowel syndrome.

WO200283077-A2.

24-OCT-2002

15-APR-2002; 2002WO-US012063.

13-APR-2001; 2001US-00834597.

GENOME THERAPEUTICS CORP (SCHE ) SCHERING CORP (GENO-) GENOME THERADE

Del Mastro RG; Dupuis J, Van Eerdewegh P, Pandit S; Little RD, Allen K, E Keith T, Simon J,

WPI; 2003-092960/08.

or preventing New isolated gene 216 nucleic acids, useful for diagnosing, preventin treating a disorder, such as asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary disease, obesity or inflammatory bowel

New isolated gene 216 nucleic acids, useful for diagnosing, preventing or treating a disorder, such as asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary disease, obesity or inflammatory bowel

Example 10; Page 156; 650pp; English.

syndrome

This invention relates to a novel isolated nucleic acid, gene 216, identified from human chromosome 20p13-p12. The invention also discloses regions of the 216 gene that contain single nucleotide polymorphisms (SNP's) which may be used as markers for disease susceptibility or severity. The nucleotides of the invention may have antiasthmatic, antiinflammatory or anorectic activities and may be used in gene therapy. The nucleic acids, antibodies or its fragments are useful for disquosing, preventing or treating a disorder, who has respiratory diseases (e.g. asthma, bronchial hyper-responsivenes, chronic obstructive pulmonary

disease or adult respiratory distress syndrome), obesity, or inflammatory bowel syndrome. The nucleic acids are also useful for identifying increased susceptibility of a subject to the disorders mentioned. The nucleic acids can also be used as primers and templates for the recombinant production of disorder-associated peptides or polypeptides, for chromosome and gene mapping, or for tissue distribution studies. The present sequence represents a gene 216 specific PCR primer used in the

Example 10; Page 156; 650pp; English

syndrome.

disease or adult respiratory distress syndrome), obesity, or inflammatory bowel syndrome. The nucleic acids are also useful for identifying increased susceptibility of a subject to the disorders mentioned. The antiinflammatory or anorectic activities and may be used in gene therapy. The nucleic acids, antibodies or its fragments are useful for diagnosing, identified from human chromosome 20p13-p12. The invention also discloses regions of the 216 gene that contain single nucleotide polymorphisms (SNP's) which may be used as markers for disease susceptibility or severity. The nucleotides of the invention may have antiasthmatic, nucleic acids can also be used as primers and templates for the recombinant production of disorder-associated peptides or polypeptides, preventing or treating a disorder, such as respiratory diseases (e.g. asthma, bronchial hyper-responsiveness, chronic obstructive pulmonary This invention relates to a novel isolated nucleic acid, gene 216,

```
ö
                                                                                                                                                                                                                                      Human; mouse; 88; primer; gene 216; antiasthmatic; antiinflammatory; anorectic; chromosome 20p13-p12; single nucleotide polymorphism; SNP; gene therapy; respiratory disease; asthma; obesity; PCR; bronchial hyper-responsiveness; chronic obstructive pulmonary disease; adult respiratory distress syndrome; inflammatory bowel syndrome.
                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                  Del Mastro RG
                                                                            .,
                                                      4.6%; Score 13.2; DB 1; Length 20; 33.3%; Pred. No. 4.6e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                     Human gene 216 polymorphism detection PCR primer #97.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Dupuis J,
                                     Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Van Eerdewegh P,
                                                                                                                                                                                                                                                                                                                                                                                                   SCHERING CORP. GENOME THERAPEUTICS CORP.
                                                                                             764 GGCCTCCACTTCTGAGGG 781
                                                                                                                N
                                                                                                                                                              BP
                                                                                                                                                                                                                                                                                                                                                                                                                        Little RD, Vau
                                                                                                                                                                                                                                                                                                                                                      15-APR-2002; 2002WO-US012063.
                                                                                                                                                                                                                                                                                                                                                                       13-APR-2001; 2001US-00834597.
13-APR-2001; 2001WO-US012245.
                                                                83.38;
                                                                                                               19 GGCCTCTACTCCTGAGAG
                                                                                                                                                             ABX75040 standard; DNA; 20
                                                                                                                                                                                                  (first entry)
                                                                          Conservative
                  scope of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-092960/08
                                                                Local Similarity
les 15; Conserv
                                                                                                                                                                                                                                                                                                                WO200283077-A2.
                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                  25-MAR-2003
                                                                                                                                                                                                                                                                                                                                   24-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                Keith T,
Simon J,
                                                                                                                                                                                ABX75040;
                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                    (SCHE )
(GENO-)
                                                                                                                                           RESULT 273
                                                                        Matches
                                                                                                                                                      ABX75040/
8 $ 8 8 8 8
                                                                                                             g
```

SXXX

à qq

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (/EDET)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ()NINIO()
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (LACR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (/WINH)
                                                                                                                                                                                                                                                                                         RESULT 275
ADA27565/c
                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                    ADA27565/
                                                                                                                                                                                                                                                                                                                                qq
                                                                                                                                                                                                                                            à
                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequences ABZ74897-ABZ74942 represent antisense oligonucleotides targeted to the human or murine acyl coenzyme A cholesterol acyltransferase-1 gene, which inhibit its expression. The antisense oligonucleotides were designed to target different regions of the human or murine acyl coenzyme
                                                                                                                                                                                                                                                                                                                                                                                         MOE
                                                                                                                                                                                                                                                                                                                                                                                                                               /mod_base= OTHER
/note= "2'-methoxyethyl (2'-MOE) nucleotides. All 2' MOE
cytosines are 5-methylcytosine"
                                                                                                                                                                                                      Human acyl coenzyme A cholesterol acyltransferase-1 antisense oligo #34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New antisense oligonucleotides targeted to a nucleic acid encoding acyl coenzyme A cholesterol acyltransferase-1, useful for treating a disease/condition involving abnormal lipid or cholesterol metabolism, e.g. atherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                         'n
                                                                                                                                                                                                                                chromosome 1q25; chromosome 1; chromosome 7; cholesterol metabolism; free sterol regulation; cholesterol metabolism disorder; lipid metabolism disorder; atherosclerosis; cardiovascular disease; cardiant; expression inhibition; phosphorothioate; antisense oligonucleotide; ss.
                                                           Gaps
                                                                                                                                                                                                                       coenzyme A cholesterol acyltransferase-1; ACAT; liver;
                                                                                                                                                                                                                                                                                                                                                                                       /note= "2'-methoxyethyl (2'-MOE) nucleotides. All cytosines are 5-methylcytosine"
                                                         0;
                                      4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02;
                                                         Indels
                                                                                                                                                                                                                                                                                                                                                   'note = "Phosphorothioate linkages"
                    BP, 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lemonidis KM;
                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 3; Page 91; 117pp; English.
                                                                                                                                                                                                                                                                                                                                          'mod base OTHER
                                                                                                                                                                                                                                                                                                                                                                                base= OTHER
                                                                             764 GGCCTCCACTTCTGAGGG 781
                                                                                               d
                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-AUG-2001; 2001US-00920394.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-JUL-2002; 2002WO-US022696
                                                                                              19 decereracrecreadad
                                                                                                                                               ABZ74914 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                       Δ
                                                                                                                                                                                                                                                                                                                                                                                                                        υ
                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                   ø
                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                             L. .5
'*tag=
                                                                                                                                                                                                                                                                                                                                                                                                             16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Graham MJ,
                                                                                                                                                                                                                                                                                                                         ...20
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag=
  scope of the invention
                                                                                                                                                                                                                                                                                                                                                                                 /mod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-239532/23
                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003012144-A1
                                                                                                                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                                                                                                                              modified base
                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                          acyl
                     Sequence 20
                                                                                                                                                                                    10-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13~FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Crooke RM,
                                                           15;
                                                                                                                                                                 ABZ74914;
                                                           Matches
                                                                                                                                                                                                                                                                                                                 Key
                                                                                                                                       ABZ74914
```

```
chromosomes (chromosomes 1 and 7) by a novel RNA recombination mechanism involving trans-splicing of the two discontinuous precursor mRNAs. The disgonacleotides of the invention are useful for the prevention and treatment of conditions associated with acyl coenzyme A cholesterol acyltransferase-1, such as disorders involving abnormal lipid or cholesterol metabolism, e.g., atherosclerosis or cardiovascular disease. They are also useful in research and diagnostics for modulating the expression of acyl coenzyme A cholesterol acyltransferase-1
A cholesterol acyltransferase-1 RNA, and were analysed for their effect on acyl coenzyme A cholesterol acyltransferase-1 mRNA levels by quantitative real-time PCR. Acyl coenzyme A cholesterol acyltransferase (ACAT) enzymes catalyse the synthesis of cholesterol actrs from free cholesterol and fatty acyl-CA, and are also involved in regulating the concentration of cellular free sterols. The human acyl coenzyme A cholesterol acyltransferase-1 is the predominant ACAT isoform in the liver, and the gene encoding it is located on chromosome 1q25, although subsequent study has indicated that one acyl coenzyme A cholesterol acyltransferase-1 mRNA is produced from genes on two different
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Microorganism detecting composition comprises dideoxynucleotide triphosphate(s) corresponding to one of four deoxynucleotide triphosphate, and thermally stable polymerase enzyme.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         microorganism detection; bi-directional DNA sequencing;
HLA determination; human leukocyte antigen; reduced error risk;
reduced contamination risk; sequencing; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 13.2; DB 1; Length 20;
Pred. No. 4.6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . 4.6e+02;
. --- 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 6 A; 8 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lacroix J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Micoorganism sequencing primer #165.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 35; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           912 CAGATTATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Dunn JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96US-00640672.
96US-00684498.
97US-00807138.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-00009483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-MAR-2001; 2001US-00802110
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 CAGAATTTCATCACCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity thes 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADA27565 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-576607/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Leushner J, Hui M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LEUSHNER J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LACROIX J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DUNN J M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003082535-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HUI M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-APR-1997;
20-JAN-1998;
13-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-FEB-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAY-1996,
19-JUL-1996,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADA27565;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bacteria.
```

0

```
ð
 g
```

The invention relates to a microorganism detecting composition. The composition is used for detecting a target microorganism. It is used in a bi-directional DNA sequencing method in several contexts including detection of mutations, particularly mutations of medical significance, in samples derived from a human patient, animal, plant, or microorganism, of tamination of fill (human leukocyte antigen) type ancillary to transplant procedures, detection and identification of microorganisms, particularly pathogenic microorganisms, in a sample and in situ is esquencing reactions to produce sequencing fragments within a histological specimen which are then removed from a selected location on the tissue preparation and loaded onto a gel for sequence analysis. The abundance DNA sample: It provides for bi-directional sequencing of DNA which requires combining a complex DNA-containing sample with only a single reaction mixture, thus reducing risk of error and contamination, and increasing the ease with which the procedure can be automatical. 0; and increasing the ease with which the procedure can be automated. The present sequence represents a sequencing primer for identification of a Gaps Sequence 20 BP; 6 A; 1 C; 10 G; 3 T; 0 U; 0 Other; 4.6%; 83.3%; microorganism.

·, Score 13.2; DB 1; Length 20; Pred. No. 4.6e+02; 0; Mismatches 3; Indels ;0 921 ATCACCACCACCTCCAG 938 m 20 Arccccaccrrccrccag Best Local Similarity 83.3 Matches 15; Conservative

ACD05017 standard; DNA; 20 BP. 05-AUG-2003 (first entry) ACD05017; Tumour RESULT 276

necrosis factor alpha antisense oligonucleotide #29.

Tumour necrosis factor alpha, TNP-alpha, antiinflammatory; antirheumatic; antidrabetic; dermatological; hepatotropic; antidashmatic; inflammatory bowel disease, crohn's disease; colifis, rheumatoid arthritis, diabetes; pancreatitis; multiple sclerosis; atopic dermatitis; asthma; hepatitis; antisense technology; ss

Synthetic.

US2003022848-A1.

30-JAN-2003

02-APR-2001; 2001US-00824322.

98US-00166186. 99US-00313932. 05-OCT-1998; 18-MAY-1999;

(BAKE/) BAKER B F. (BENN/) BENNETT C F. (BUTL/) BUTLER M M. (SHAN/) SHANAHAN W R.

WPI; 2003-447433/42.

Baker BF, Bennett CF,

Shanahan WR;

Butler MM,

Treating inflammatory disorders such as inflammatory bowel disease, Crohn's disease or rheumatoid arthritis, in a subject, by administering oligonucleotide which inhibits expression of human tumor necrosis factor

30-JUL-2001; 2001US-00917963. 17-JUL-2002; 2002WO-US022799.

(ISIS-) ISIS PHARM INC

Graham MJ;

Crooke RM,

WPI; 2003-300705/29.

```
.
0
                                    an individual, comprising administering to the individual an oligonucleotide upto 30 nucleotides in length complementary to a nucleic acid molecule encoding human tumor necrosis factor (TMF)-alpha. The method is useful for treating an inflammatory disorder such as inflammatory bowel disease, Crohn's disease, colitis or rhematoid diabetes, pancreatitis, maltiple sclerosis, atopic dermaticis, asthma, and hepatitis in an individual. This sequence represents an antisense oligonucleotide used to modulate expression of tumour necrosis factor alpha (TMF-alpha)
                           The invention describes a method of treating an inflammatory disorder in
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Microsomal triglyceride transfer protein antisense oligonucleotide #96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           microsomal triglyceride transfer protein; antisense oligonucleotide; hybridisation; microsomal triglyceride transfer protein inhibitor; cardiant; antiarteriosclerotic; antilapemic; antisense gene therapy; abnormal lipid metabolism; abnormal cholesterol metabolism; atherosclerosis; cardiovascular disease; mouse; phosphorothioate; ss;
                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'note= "phosphorothioate linkages, and all cytidine
                                                                                                                                                                                                                                                           ..
0
                                                                                                                                                                                                                           Score 13.2; DB 1; Length 20;
Pred. No. 4.6e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                 Sequence 20 BP; 5 A; 10 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           residues are 5-methylcytidines"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mod_base= OTHER
/note= "2'-O-methoxyethyls"
16. .20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note= "2'-0-methoxyethyls"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
Claim 2; Page 12; 142pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           base= OTHER
                                                                                                                                                                                                                                                                                 759 CCCTAGGCCTCCACTTCT 776
                                                                                                                                                                                                                                                                                                             19
                                                                                                                                                                                                                                                                                                                                                                                ADB68680 standard; DNA; 20 BP.
                                                                                                                                                                                                                            4.6%;
                                                                                                                                                                                                                                                                                                           2 cccraagcccccaarrcr
                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                υ
                                                                                                                                                                                                                                                       15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag=
                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2'-O-methoxyethyl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003018600-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                            ADB68680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic
                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                      RESULT 277
                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                   ADB68680
                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                          q
```

```
19-APR-2002; 2002US-00126355.
                                                                                                                                                                                    19-APR-2002; 2002US-00126355.
                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                    US2003198965-A1.
                                                                                                                                                                Homo sapiens
                                                                                                                                                                          23-OCT-2003.
                                                                                                                                     29-JAN-2004
                                                                                                                               ADE14447;
                                                                                                             N
                                                                                                  Matches
                                                                                                                     RESULT
                                                                                                                           ð
                                                                                                             g
```

Freier SM;

2003-852782/79 Homo sapiens Bennett CF, 29-JAN-2004 18-SEP-2003. Synthetic. ADE27963; Query Match RESULT 279 Matches ADE27963 g ð The present invention describes compounds (I) comprising 8-50 nucleobases in length targeted to a nucleic acid molecule encoding a microsomal crigoredide transfer protein, where the compounds specifically hybridise with and inhibit the expression of the microsomal triglyceride transfer protein. Also described: (I) a compound 8-50 nucleobases in length which specifically hybridises with at least an 8-nucleobase portion of an aucleic acid molecule encoding microsomal triglyceride transfer protein; (2) a composition comprising (I) and a carrier or circuses represent the sexpression of microsomal triglyceride transfer protein in cells or tissues, comprising (I) and a carrier or tissues with (I) so that expression of microsomal triglyceride transfer protein is inhibited; and (4) treating an animal having a disease or condition associated with microsomal triglyceride transfer protein, comprising administering (I) to the animal so that expression of microsomal triglyceride transfer protein, comprising administering (I) to the animal so that expression of antimateriosclerotic and antilipaemic activities, and can be used in antisense gene therapy. The methods and compositions of the present convention are useful for the diagnosis, prevention and/or treatment of invention are useful for the diagnosis, prevention and/or treatment of invention are useful for the diagnosis, prevention and/or treatment of invention are useful for the diagnosis, prevention and/or treatment of invention are useful for the diagnosis, prevention and/or treatment of invention are useful for the diagnosis, prevention and/or treatment of invention are useful for the diagnosis, prevention and/or treatment of invention are useful for the diagnosis, prevention and/or treatment of collesterol metabolism condition like atherosoclaronsmal lipid or disease or conditions reminent expression or activity of alloase or the present secular expenses and candioveride transfer protein, such as an abnormal lipid or activity of the present secular expenses or condi 0; disease. The present sequence represents a mouse microsomal triglyceride transfer protein chimeric phosphorothioate antisense oligonucleotide, which is used in an example from the present invention. New antisense oligonucleotide compounds, useful for diagnosing, preventing and/or treating conditions with aberrant activity of the microsomal triglyceride transfer protein, such as atherosclerosis and heart disease. Gaps osteopathic; antidepressant; anorectic; antidiabetic; antiarteriosclerotic; antilipemic; antisense-therapy; hydroxysteroid 11-beta dehydrogenase 1; osteoporosis; depression; metabolic disorder; obesity; HSD11B1; diabetes; atherosclerosis; . 0 4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02; Indels Sequence 20 BP; 5 A; 9 C; 3 G; 3 T; 0 U; 0 Other; hyperlipidaemia; antisense technology; human; ss. HSD11B1 antisense oligonucleotide seg id 49. 0; Mismatches Claim 3; Page 98; 135pp; English. 916 TIATCATCACCACCACC 933 TTATCACCACAGCCACCC 19 ADE14447 standard; DNA; 20 BP (first entry) 15; Conservative

. 0 The invention describes a compound (I) 8-80 nucleobases in length targeted to a nucleic acid molecule encoding hydroxysteroid Il-beta dehydrogenase 1, inhibiting expression of hydroxysteroid Il-beta dehydrogenase 1. The methods and compositions of the present invention are useful for treating disorders associated with hydroxysteroid Il-beta metholic disorders like obesity, diabetes, depression and metabolic disorders like obesity, diabetes, atherosclerosis and hyperlipidaemia. This sequence represents an antisense oligonucleotide used to control the expression of human hydroxysteroid Il-beta New antisense compounds useful for treating disorders associated with hydroxysteroid 11-beta dehydrogenase 1 expression, such as osteoporosis, depression and metabolic disorders like obesity, diabetes and ireating an inflammatory skin disorder such as psoriasis comprises topically applying an antisense compound targeted to the nucleic acid encoding human B7 protein. Gaps ss; human; B7-1; inflammatory skin disorder; antisense; psoriasis; contact dermatitis; atopic dermatitis; seborrheic dermatitis; nummular dermatitis; generalised exfoliative dermatitis; eczema; critical costimulatory molecule. 0; 4.6%; Score 13.2; DB 1; Length 20; 83.3%; Pred. No. 4.6e+02; 3; Indels Sequence 20 BP; 6 A; 2 C; 6 G; 6 T; 0 U; 0 Other; Human B7-1 targeted oligonucleotide SEQ ID 225. 0; Mismatches Example 19; SEQ ID NO 225; 88pp; English. Claim 3; SEQ ID NO 49; 53pp; English Karras JG; 857 7 ADE27963 standard; DNA; 20 BP. 09-MAY-2001; 2001US-00851871. 04-JUN-1999; 99US-00326186. 25-MAY-2000; 2000WO-US014471. 31-DEC-1996; 96US-00777266. 83.3%; 840 TCTCTGAAGACAGCGTCC 19 rcrargaagacarcricc (first entry) Vickers TA, 15; Conservative (BENN/) BENNETT C F. (VICK/) VICKERS T A. WPI; 2003-863863/80. (VICK/) VICKERS T A (KARR/) KARRAS J G. Local Similarity US2003176374-A1. atherosclerosis. dehydrogenase 1. 

```
*55555555555
```

The invention relates to a method of treating an inflammatory skin disorder in an individual by topically applying an antisense compound trargeted to a nucleic acid molecule encoding a human B7 protein. The invention is for treating an inflammatory skin disorder in individual. The skin disorder is psoriasis, contact dermatitis, atopic dermatitis, seborrheic dermatitis, nummular dermatitis, generalised exfoliative dermatitis or eczema. The invention effectively modulates critical costimulatory molecules such as the B7 protein. The present sequence represents a human B7-1 targeted oligonucleotide.

Sequence 20 BP; 5 A; 6 C; 3 G; 6 T; 0 U; 0 Other;

Length 20; 4.6%; Score 13.2; DB 1; Length 2/ 33.3%; Pred. No. 4.6e+02; ... Mismatches 3; Indels 931 CCCTCCAGAGAATTTTAC 948 83.3%; Local Similarity 83.3 nes 15; Conservative Query Match

.; 0

Gaps

;

cccrccagrantiac 18

ABZ72890 standard; RNA; 14 BP. ABZ72890; 

09-APR-2003 (first entry)

Rod opsin hairpin ribozyme oligonucleotide.

Hairpin ribozyme; hammerhead ribozyme; ribozyme; retinal disease; target; ophthalmological; gene therapy; eye; retinal dysfunction; AAV; diabetic retinopathy; macular degeneration; autosomal dominant retinitis; blood-retinal barrier dysfunction; adeno-associated virus; blindness; ss.

Homo sapiens. Synthetic.

WO200288320-A2. 07-NOV-2002 01-MAY-2002; 2002WO-US013679.

01-MAY-2001; 2001US-00847601

UYFL ) UNIV FLORIDA.

Lewin AS, Shaw LC,

WPI; 2003-111880/10.

e.g. A recombinant adeno-associated virus-vectored ribozyme composition, useful for treating a disease or dysfunction of the mammalian eye e retinal disease, e.g. diabetic retinopathy or age-related macular degeneration.

Example 5; Page 63; 115pp; English.

The present invention describes a recombinant adeno-associated virus (AAV) vectored ribozyme composition (1). (1) comprises: (a) at least a first ribozyme that specifically cleaves an mRNA encoding a protein, polypebtide, or peptide selected from the group of rod opsin, iNOS, RDS/peripherin, VEGFR1, VEGFR2, adenosine A-2B receptor, IGF-1, integrin alpha 1, integrin alpha 3, integrin alpha 5, or integrin alpha V; (b) a vector comprising a polymucleotide encoding the ribozyme, where the polymucleotide operably positioned downstream of at least a first polymucleotide operably positioned downstream of at least a first mammalian cell transformed with the vector; (c) a viral particle comprising the ribozyme or the polymucleotide; (d) an AAV vector comprising the ribozyme or the polymucleotide; (d) an AAV vector

comprising the ribozyme or the polynucleotide. Also described is a method for decreasing the amount of mRNA encoding a selected polypeptide in a retinal cell of a mammalian eye, comprising providing to the eye the composition described above, and for a time effective to specifically cleave the mRNA in the cell. (I) has ophthalmological activity, and can be used in gene therapy. (I) can be used for treating a disease or dysfunction of the mammalian eye, such as a retinal disease or retinal dysfunction. (I) is also useful for manufacturing a medicament for treating the diseases mentioned above, including autosomal dominant retinitis or a blood-retinal barrier dysfunction. (I) can also be useful for treating, decreasing the severity, or ameliorating the symptoms of a pathological condition, e.g. atrophic or pigmented lesions of the eye, blindness, a reduction in central or peripheral vision, or a reduction in central or peripheral vision. . 0 Gaps .. 4.5%; Score 13; DB 1; Length 14; 0; Indels Sequence 14 BP; 3 A; 4 C; 4 G; 0 T; 3 U; 0 Other; Pred. No. 3.1e+02; Query Match Matches 

100.0%; Pred. No. Local Similarity 100. nes 13; Conservative

770 CACTTCTGAGGGC 782 13 CACTICTGAGGGC 1 q ò

AAT50305 standard; RNA; 15 BP. AAT50305

AAT50305;

(first entry) 11-MAR-1997 

Rabbit CETP HH ribozyme target sequence #1110.

Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage; neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy; reverse cholesterol transport; high density lipoprotein; therapy; CETP; familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia; peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor; angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit;

Oryctolagus cuniculus.

04-JUL-1996.

95WO-US016000. 11-DEC-1995; 94US-00363240. 23-DEC-1994;

(RIBO-) RIBOZYME PHARM INC.

(WARN ) WARNER LAMBERT CO.

Couture L, Stinchcomb D, Mcswiggen J,

Bisgaier C,

WPI; 1996-321852/32.

New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA -useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia.

Claim 4; Page 42; 72pp; English.

AAT50138-T50359 represent target sequences for the rabbit cholesterol ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT50360-T50546). CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers

```
to the position of the cleavage site in full length CETP. The ribozyme the binds to 5 nucleotides either side of this site. The ribozymes are able to cleave mRNA from the gene encoding CETP, thereby blocking synthesis and/Or expression of the mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density conclusions (HDL), prolonging HDL half life, and therefore increasing the lipoproteins (HDL), prolonging HDL half life, and therefore increasing the labormal levels of CETP, specifically atherosclerosis, familial abnormal levels of CETP, specifically atherosclerosis, familial hyperbetalipoproteinaemia, peripheral vascular disease, dyslipidaemia, hyperbetalipoproteinaemia, transplant, atherectomy and angioplastic complications of diabetes, transplant, atherectomy and angioplastic restencis. By inhibiting CETP, the levels of HDL and low density complications of diabetes, transplant, atherectomy and altered (a decrease in LDL) levels, and a corresponding increase in HDL levels). The HT ribozymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes cranspet specific regions of the CETP gene, they have low non-specific activity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; antilipaemic; neuroprotective; nootropic; genetic variant; APOE; apolipoprotein E; haplotyping; familial dysbetalipoproteinaemia; therapy; genotyping; type III hyperlipoproteinaemia; Alzheimer's disease; atherosclerosis; polymorphism; allele specific oligonucleotide; ASO primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human apolipoprotein E (APOE) gene polymorphism detecting ASO primer #7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                               4.5%; Score 13; DB 1; Length 15; 76.9%; Pred. No. 3.4e+02; Live 3; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 5 A; 6 C; 1 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAD26056 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-APR-2001; 2001WO-US012303.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-APR-2000; 2000US-0197188P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               917 TATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 76.9
Les 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200179234-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAD26056;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAD26056/
                      8666666666666666666686<del>8</del>8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
```

Genotyping human apolipoprotein gene of individual for determining haplotype of individual, involves determining identity of nucleotide pair at specific polymorphic sites for two copies of gene.

Lee HH;

Kliem SE, Koshy B,

Choi JY,

WPI; 2002-075064/10.

(GENA-) GENAISSANCE PHARM INC

The patent discloses novel genetic variants of human apolipoprotein E (APOE) gene. The invention also relates to compositions and methods for haplotyping and/or genotyping the APOE gene. The haplotyping methods of the invention are useful for improving the efficacy and reliability of

Claim 16; Page 14; 78pp; English.

```
The sequences given in AAQ48323-33 are primers which were used in the cloning of the heavy (H) and light (L) chains of the antihuman interleukin-4 (IL-4) monoclonal antibody (MAD) 25D2. The complementarity determining regions (CDRs) of this antibody may be grafted onto a human antibody to produce a humanised antibody. It may also be desirable to include one or more amino acid residues which, while outside the CDRs, are likely to interact with the CDRs or IL-4. These sequences may also be used to produce single chain IL-4 binding proteins comprising linked heavy and light chain fragments of the Fv region, or biosynthetic antibody binding sites. The humanised MAD is an IL-4 antagonist. It may
diseases associated with APOE activity, e.g. familial dysbetalioproteinaemia, type III hyperlipoproteinaemia, atherosclerosis, and Alzheinaemia type III hyperlipoproteinaemia, atherosclerosis, and Alzheinaer's disease. They are useful to validate APOE as a candidate associated with APOE activity and in the design of clinical trials of candidate drugs for treating a specific condition or disease predicted to be associated with APOE activity. Genotyping or haplotyping methods are useful to screen for compounds targeting APOE to treat a specific condition or disease associated with APOE activity. The present DNA sequence is an allele specific oligonucleotide (ASO) primer which is used
                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CDRs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Heavy; VH; light; VL; chain; variable region; antihuman; interleukin-4; IL-4; monoclonal antibody; MAb; 25D2; single chain binding protein; complementarity determining region; CDR; humanised; Fv region; BABS; antagonist; polymerase chain reaction; PCR; primer; amplify; ss.
                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DNA and (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nguyen H;
                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Monoclonal antibodies against human interleukin-4 corresp. are useful for detection of interleukin-4 and treatment of
                                                                                                                                                                                                                                                                   Score 13; DB 1; Length 15;
Pred. No. 3.4e+02;
                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Murgolo NJ,
                                                                                                                                                                                                                                     Sequence 15 BP; 3 A; 4 C; 6 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                                                    for detecting human APOE gene polymorphisms
                                                                                                                                                                                                                                                                                                           1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Miller K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 8; Page 77; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Le HV, Mille
Zavodny PJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92US-00841659.
                                                                                                                                                                                                                                                                      4.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93WO-US001301
                                                                                                                                                                                                                                                                                                                                            747 GGGTCCCAGGGTCCC 761
                                                                                                                                                                                                                                                                                                                                                                             15 GSTrcccAGGGrccc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ48328 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                             13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MAb 25D2 primer B1902.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Dalie B,
Tindall S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (SCHE ) SCHERING CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1993-288412/36.
                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-FEB-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9317106-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-FEB-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-SEP-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Abrams JS,
Pearce M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ48328;
                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 283
                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ48328/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                               셤
```

rng.res

```
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Humanised monoclonal antibody against human interleukin (IL)-4 - has increased binding affinity and expression, and hence greater therapeutic value in the treatment of IL-4 related diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The primers AAQ98832-42 were used in the PCR amplification of the anti-human IL-4 humanised monoclonal antibody (MAb) h25D2-9 cDNA. The Ab encoded by the cDNA can be used for the prepa., purifcn. and immunoassay of the humanised Abs. Pharmaceutical compsns. and anti-idiotypic Abs (against the MAb) can also be prepd. for the treatment of IL-4 related diseases by respectively suppressing, or imitating the binding activity
be used in a pharmaceutical composition for detecting, measuring and immuno- purifying human IL-4 and blocking IL-4 activity in IL-4-related diseases. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                   Anti-human interleukin-4; IL-4; humanised; purification; treatment;
IL-4 diseases; immunoassay; variable region; h25D2-9; PCR primer B1902;
                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                Anti-human IL-4 MAb h25D2-9 variable region PCR primer B1902.
                                                           Score 13; DB 1; Length 16;
Pred. No. 3.7e+02;
0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.5%; Score 13; DB 1; Length 16; 100.0%; Pred. No. 3.7e+02; rative 0; Mismatches 0; Indels
                                        Sequence 16 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 16 BP; 5 A; 5 C; 3 G; 3 T; 0 U; 0 Other;
                                                                100.0%; Pred. arrive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                     Tindall S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 1; Page 70; 116pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                    Miller K, Murgolo N,
                                                                                                                                                                      AAQ98837 standard; DNA; 16 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX09974 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                          95WO-US002400
                                                                                                                                                                                                                                                                                                                                                                             94US-00208886
                                                                                                   718 GAGAGTGACTCTG 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               718 GAGAGTGACTCTG 730
                                                                                                                                                                                                             19-APR-1996 (first entry)
                                                    Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16 GAGAGTGACTCTG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAGTGACTCTG 4
                                                                                                                                                                                                                                                                                                                                                                                                (SCHE ) SCHERING CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1995-328272/42.
                                                                                                                                                                                                                                                                                                                                                         08-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                            10-MAR-1994;
                                                                                                                                                                                                                                                                          antibody; ss
                                                                                                                                                                                                                                                                                                                  W09524481-A2
                                                                                                                                                                                                                                                                                                                                     14-SEP-1995
                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                          AAQ98837;
                                                                                                                                                                                                                                                                                                                                                                                                                    Dalie B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 285
AAX09974/c
                                                                                                                                                   RESULT 284
                                                                                                                                                             8 x 8 8 8
                                                                                                   6
                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
```

```
AAX09121-X10268 are allele-specific oligonuclectide primers used in the isolation of various biallelic polymorphic markers found in the human genome (represented in AAX10269-X12337). These primers can be used in a certain etchod for determining polymorphic forms in an individual for use in e.g. forensics, paternity testing or for phenotypic typing for diseases such as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial hypercholesterolemia, polycystic kidney disease, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary conformination cancer, diseases of the nervous syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous system, infection by pathogenic microorganisms, and characteristics such as longevity, appearance (e.g. baldness, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid conventibility and sused to produce medicaments for the treatment or morn'n avis of enth or produce medicaments for the treatment or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                        Polymorphism; biallelic; human; forensic; paternity testing; disease, detection; phenotypic typing; characteristic; infection; hereditary; autoimmune disease; cancer; inflammation; drug; therapy; medicament; treatment; marker; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid segments from the human genome - used for determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                     Human biallelic polymorphic marker downstream primer #280.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.5%; Score 13; DB 1; Length 16;
100.0%; Pred. No. 3.7e+02;
tive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 16 BP; 3 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 16; Page 85; 310pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hudson T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAV96653 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97WO-US020313.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   prophylaxis of such diseases
                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           750 TCCCAGGGTCCCT 762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-MAR-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCCAGGGTCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lander ES, Wang D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1998-286974/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9820165-A2.
                                                                      24-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-NOV-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
AAX09974;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV96653/,
ID AAV9
XX
AC AAV9
XX
DT 01-M
```

```
The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity (e.g. ribozymes) which are capable of modulating the expression of plant genes: (i) involved in biosynthesis of alkaloids; or (ii) involved in flower formation. AAV95382 to AAV96334, and AAV96335 to AAV96354 represent potato solanidine glucosyltransferase hammerhead and hairpin ribozymes, respectively. AAV95629 to AAV95381, and AAV96355 to AAV96773 to AAV97710, and AAV97711 to AAV97195 represent potato colanidine glucosyltransferase target sequences. AAV96773 to AAV97710, and AAV97710 to AAV97195 represent potato citrate synthase hammerhead and hairpin ribozymes, respectively. AAV96735 to AAV96773, and AAV97710 to AAV97710 contact of this the synthase sequences. Ribozymes of the present invention can be used to inhibit the synthesis of toxic alkaloids in solanaceous plants, to inhibit flowering in potato, lettuce, spinach, cabage, brussel sprouts, arugula, kale, collards, chard, beet, turnip, sweet potato and turf grass. Also the ribozymes can be used for RNA manipulation in the same way that restriction endonucleases are for DNA, as well as to examine genetic drift and mutations in plants and to detect specific RNA. The ribozymes can be targeted to specific genes or to consensus sequences ribozymes can be targeted to specific genes or to consensus sequences or the restriction and plants and to detect specific RNA. The ribozymes can be targeted to specific genes or to consensus sequences or the ribozymes, and being catalytic need to be present
                                      Solanidine; glucosyltransferase; potato; citrate synthase; target; hammerhead ribozyme; hairpin ribozyme; alkaloid biosynthesis; flower formation; cleavage; solanaceous plant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New enzymatic nucleic acid(s) - useful for, e.g. reducing alkaloid
Potato citrate synthase target sequence position 1383.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seguence 17 BP; 3 A; 3 C; 5 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      biosynthesis or regulating flowering.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 53; Page 56; 79pp; English.
                                                                                                                                                                                                                                                                                  98WO-US000738
                                                                                                                                                                                                                                                                                                                              97US-0036545P
                                                                                                                                                                                                                                                                                                                                                  97US-0036599P
97US-00979416
                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-427939/36.
                                                                                                                                             Solanum tuberosum.
                                                                                                                                                                                        WO9832843-A2.
                                                                                                                                                                                                                                                                                  14-JAN-1998;
                                                                                                                                                                                                                                                                                                                                 28-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                            24-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                       28-JAN-1997
                                                                                                                                                                                                                                    30-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zwick MG,
```

```
ö
                              Gaps
                            .,0
4.5%; Score 13; DB 1; Length 17; 100.0%; Pred. No. 4e+02; ative 0; Mismatches 0; Indels
 Length 17;
                                                       794 TGCCAAGACTCT 806
                              Conservative
    Query Match
Best Local Similarity
                              13;
                               Matches
                                                          ð
```

AAV96652 standard; RNA; 17 BP. receasescrer 1 13 RESULT 287 AAV96652, 임

Potato citrate synthase target sequence position 1381.

(first entry)

AAV96652;

Solanidine; glucosyltransferase; potato; citrate synthase; target;

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity (e.g. ribozymes) which are capable of modulating the expression of plant genes: (i) involved in blosynthesis of alkaloids; or (ii) involved in flower formation. AAV95382 to AAV95334, and AAV96335 to AAV96354 represent potato solanidine glucosyltransferase hammerhead and hairpin ribozymes, respectively. AAV95629 to AAV95391, and AAV96335 to AAV96734 represent potato solanidine glucosyltransferase target concess. AAV9673 to AAV97170, and AAV97171 to AAV97195 represent contrate synthase hammerhead and hairpin ribozymes, respectively. CC potato citrate synthase target sequences. Ribozymes of the present potato citrate cynthase target sequences. Ribozymes of the present invention can be used cynthase target sequences. Ribozymes of the present invention can be used to inhibit thowering in potato, lettuce, spinach, cabbage, brussel sprouts, arugula, kale, collards, chard, beet, turnip, sweet potato and turf crimibit kale, collards, chard, beet, turnip, sweet potato and turf craugular can muterions in plants and to detect spotato and turf craugular than muterions in plants and to detect specific genes cribozymes can be targeted to specific genes or to consensus sequences within a family of related genes, and being catalytic need to be present consensus and turk at only very low concentrations. Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzhelmer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds. Gaps New enzymatic nucleic acid(s) - useful for, e.g. reducing alkaloid biosynthesis or regulating flowering. 0 hammerhead ribozyme; hairpin ribozyme; alkaloid biosynthesis; flower formation; cleavage; solanaceous plant; ss. Tumour suppression related human fukutin oligo SEQ ID No 268. 4.5%; Score 13; DB 1; Length 17; 100.0%; Pred. No. 4e+02; 0; Indels Sequence 17 BP; 4 A; 4 C; 4 G; 0 T; 5 U; 0 Other; 100.0%; Prea. ... Claim 53; Page 56; 79pp; English. ABT34631 standard; DNA; 17 BP. 97US-0036545P. 97US-0036599P. 97US-00979416. 98WO-US000738 (RIBO-) RIBOZYME PHARM INC. 794 TGCCAAGAGCICI 806 (first entry) Conservative TGCCAAGAGCTCT 3 Mcswiggen JA; WPI; 1998-427939/36. Local Similarity Solanum tuberosum. 14-JAN-1998; 28-JAN-1997; 28-JAN-1997; WO9832843-A2 24-NOV-1997; 12-JUN-2003 13; 30-JUL-1998 Zwick MG, ABT34631; 15 Query Match ABT34631/c Matches RESULT g à

(MOLE-) MOLECULAR ENGINES LAB

17-SEP-2002; 2002WO-IB004219. 17-SEP-2001; 2001FR-00011981.

WO2003040369-A2.

15-MAY-2003

```
(MOLE-) MOLECULAR ENGINES LAB.
                      17-SEP-2002; 2002WO-IB004208.
                            17-SEP-2001; 2001FR-00011978
                                         Telerman A, Amson R,
                                                WPI; 2003-313353/30.
         WO2003025175-A2.
   Homo sapiens.
                27-MAR-2003
```

Tuijnder M;

```
The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment at least 80 % identity to the 17 mer sequence, a sequence that conditions from the component of alignment of them, or the corresponding RNA. The novel isolated nucleic of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for derecting, identifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, containing the nucleic acids, cells containing the polypeptides, vectors containing the nucleic acids, cells containing the polypeptides in paracterised by development of tumours or cell diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and containing the superior prognosis of these can also be used to generate antibodies, and both the polypeptides can also be used to generate antibodies, and both the meaning of protein and antibodies are useful as components of protein
New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           μουμ τηε polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.5%; Score 13; DB 1; Length 17;
100.0%; Pred. No. 4e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 2 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100.0%; Prec. ...
                                                                                                                                                                                                       Disclosure; Page 65; 720pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            709 GAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 100.
1es 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
```

```
Best Loca
Matches
                   ð
```

·.

GAGTCCCAGGAGA 3 15

g

ADB44659 standard; DNA; 17 BP. ADB44659; RESULT 289

18-DEC-2003 (first entry)

Tumour suppression/reversion associated nucleotide #4982.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides. The nucleotides are used as probes or primers for detecting, clentifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as crecombinant polypeptides, and to prepare transgenic animals, as corperimental models. The nucleotides (also vectors containing them and calls containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or viral infections of fise nucleotides can be used for disagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, conversing the nucleotide interactive molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                      New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.5%; Score 13; DB 1; Length 17; 100.0%; Pred. No. 4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 2 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Preq. ...
                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 614; 771pp; French.
                                                                                                                                                                                                                 Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     709 GAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15 GAGTCCCAGGAGA 3
                                                                                                                                                                                                             Felerman A, Amson R,
                                                                                                                                                                                                                                                    WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX57206,
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     임
```

AAX57206 standard; DNA; 18 BP. (first entry) 28-JUL-1999 AAX57206; 

Cysteine noose library SCFV JH region primer.

Cysteine noose; antibody variable domain; CDR; cytokine; agonist; complementarity determining region; antagonist; mimetic; antigen; primer; MIP-1 alpha receptor; treatment; HIV infection; CDR3; anti-HIV; ss.

ynthetic.

WO9923222-A1

14-MAY-1999.

```
3; Col 57-58; 37pp; English.
   Claim
                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                               AAH47596,
                                                                                                                                                                                                                                                                                                                                                                             RESULT
   8 X C C C C C C C X 8
                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense oligonucleotides, useful for inhibiting human Fas-associated death domain (FAUD) expression are targeted to the 3' untranslated region of the FADD gene.
                                                                                                                                                                                                                                                                 variable domains contraining anolfied complementarity determining regions (CDRs) carrying a cysteine nose and which have cytokine agoinst and anagonist mechanisms of action. The method of the invention can be used to obtain peptide ligand mimetics capable of binding a target antigen. The binding members may also be used to provide agonists or antagonists of targets such as cytokines. In particular specific binding members for MIP-1 alpha receptors are useful for treatment of HIV infection and for in vitro investigation of mechanisms of HIV infection. A selection of peptide ligand mimetics from CDR3 cysteine nose libraries provide a means to select a different and potentially more effective population of peptide ligands than direct display of similar cysteine nose ligands on the surface of bacteriophage. The products of the invention have anti-HIV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FADD; human; antisense; inhibitor; Fas-associated death domain; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                      This invention describes the construction of libraries of antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.5%; Score 13; DB 1; Length 18; 76.5%; Pred. No. 4.3e+02; 2; Mismatches 2; Indels
                                                                                                                                                                                Cysteine noose antibody libraries and their production.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18 BP; 2 A; 5 C; 7 G; 2 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zhang H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                        (CAMB-) CAMBRIDGE ANTIBODY TECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BF,
                                                                                                                                                                                                                     64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human FADD primer ISIS #23888.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Baker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-00357072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00357072.
     98WO-GB003255
                                      97GB-00023062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                753 CAGGGTCCCTAGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGGGTYCCYTGGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ44788 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Monia BP, Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-126316/11.
                                                                                                                                                WPI; 1999-313343/26
                                                                                                                                                                                                                     Example 2; Page 29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
les 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JUL-1999;
                                        31-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
       30-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-APR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US6015712-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ44788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ44788,
```

g à

```
0
This invention describes novel antisense oligonucleotides (OGNs) (I) 8-20 nucleotides in length that specifically hybridize with and inhibit incleic acids encoding human Fas-associated death domain (FADD), targeted to the 3' untranslated region (3'VTR). (I) can be used to treat animals, especially humans, suspected of having or being prone to a disease or condition associated with FADD expression. AAZ44746-Z44831 represent primers and probes used in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention provides antisense compounds capable of inhibiting the expression of human Her-3, a member of epidermal growth factor (EGF) family of receptor/tyrosine kinases. The antisense oligonucleotides are useful for inhibiting the expression of Her-3 in cells or tissues. They are commonly used as research reagents and in diagnostics for example, to elucidate the function of particular genes. The antisense compounds are also useful for distinguishing between functions of various members of a biological pathway and for research use. They are also utilized for diagnostics, therapeutics, prophylaxis and in kits. They are useful prophylaxically, e.g. to prevent or delay infection, inflammation or tumor formation. Sequences AH47532-47615 represent chimeric antisense phosphorothioate oligonucleotides having 2'-MOE wings and a deoxy gap,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense compounds capable of modulating expression of human Her-3, member of epidermal growth factor family of receptor/tyrosine kinases, useful for preventing or delaying infection, inflammation or tumor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Her-3; epidermal growth factor; BGF; receptor/tyrosine kinase; human; antiinflammatory; cytostatic; antibacterial; antisense; ss.
                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                  Score 13; DB 1; Length 18;
Pred. No. 4.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human Her-3 mRNA inhibiting antisense oligo ISIS # 19611.
                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 BP; 3 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                          Sequence 18 BP; 8 A; 0 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            used for the inhibition of Her-3 mRNA expression
                                                                                                                                                                                                                                    100.0%; Freu.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 15; Col 43-44; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH47596 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31-JUL-2000; 2000US-00630706.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31-JUL-2000; 2000US-00630706.
                                                                                                                                                                                                                       4.58;
                                                                                                                                                                                                                                                                                                         967 ACTCTCTAAATCT 979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                 ACTUTCTABATUT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-535134/59.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US6277640-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH47596;
                                                                                                                                                                                                                         Query Match
```

AAQ10624

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a method for identifying oligomucleotides with desired hybridisation properties to nucleic acid targets containing secondary structure. The method comprises amplifying a target nucleic acid having at least one accessible and one inaccessible site. Primers that form an extension product are identified as the oligonucleotides which can interact with the folded target nucleic acid. Oligonucleotides from the present invention can be used in novel detection methods for clinical diagnostic purposes, including the detection and identification of pathogenic organisms (e.g. HIV). The method allows the ability to rapidly analyse nucleic acid structures. ABL46034 to ABL46367 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Identifying oligonuclectides hybridizing to nucleic acids containing secondary structure, useful in clinical diagnosis, comprises identifying primers that interact with the target to form an extension product under amplification conditions.
                                                                                                                                                                                                                                                                                                                               Nucleic acid accessible hybridisation site, detection, hybridisation, characterisation, identification, nucleic acid structure; diagnosis;
                                       Gaps
                                       .,
0
       Length 18;
 4.5%; Score 13; DB 1; Length 18; 100.0%; Pred. No. 4.3e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vener IT;
                                                                                                                                                                                                                                                                                                Human interferon-gamma signal probe SEQ ID NO:150.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 2 A; 6 C; 2 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Neri BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 18; Fig 54A; 409pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (THIR-) THIRD WAVE TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dong F,
                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JUN-2001; 2001WO-US019401.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-JUN-2000; 2000US-0212308P
15-JUN-2001; 2001US-00212308
                                                                                                                                                                                         ABL46183 standard; DNA; 18
                                                                    863 CCAGTIGGAACAC 875
                                                                                                                                                                                                                                                            26-APR-2002 (first entry)
Query Match
Best Local Similarity 100.
Matches 13; Conservative
                                                                                                     13 CCAGTIGGAACAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lyamichev V, Allawi H,
                                                                                                                                                                                                                                                                                                                                                                     PCR primer; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-049698/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200198537-A2.
                                                                                                                                                                                                                                                                                                                                                                                                       sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                            ABL46183;
                                                                                                                                                                                                                                                                                                                                                                                                    Ношо
                                                                                                                                                       g
                                                                      ð
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The primer is specific for nt 1667-1685 of HLA Class I A2 locus. It is used in a method for the prodn. of RFLP fragments for an HLA locus, together with a second primer making up a locus-specific primer (LSP) pair. It is pref. used with a Class I-specific primer which hybridises with at least two different Class I loci, pref. at least one of each of hybridises with intervening sequence (IVS) III or IVS I sequences. Direct determination of the haplotye is possible, providing useful information for identity of individuals for e.g. paternity case and forensic investigations. See also AAQ10621-Q10669. (Updated on 25-MAR-2003 to
                                                                                                                      Human leukocyte antigen, major histocompatibility complex; MHC; restriction fragment length polymorphic analysis; RFLP; tissue typing;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:123.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Detection of adjacent and non:adjacent locus, e.g. HLA alleles - by amplifying genomic DNA, for direct determination of haplotype.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.5%; Score 13; DB 1; Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 5 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; Prec. ...
                                                                                           HLA Class I locus-specific primer A2.2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 29; Page 49; 53pp; English.
                                                                                                                                                                                                                                                                                   89US-00398217.
89US-00405499.
90US-00465863.
90US-00551239.
    BP.
                                                                                                                                                                                                                                                          90EP-00309107.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
 AAQ10624 standard; DNA; 19
                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABL88901 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           718 GAGAGIGACICIG 730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAGTGACTCTG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 100.
nes 13; Conservative
                                                      (revised)
                                                                                                                                                                                                                                                                                                                                                  (GENE-) GENETYPE AG.
(JEAN-) GENETYPE AG.
(SIMO/) SIMONS M J.
                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1991-059664/09.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  correct PA field.)
                                                                                                                                                  allele; PCR; ss.
                                                                                                                                                                                                                                                          20-AUG-1990;
                                                     25-MAR-2003
29-APR-1991
                                                                                                                                                                                                                                                                                   25-AUG-1989;
11-SEP-1989;
                                                                                                                                                                                                                                                                                                                          11-JUL-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-MAY-2002
                                                                                                                                                                                                                               27-FEB-1991
                                                                                                                                                                                                                                                                                                              .6-JAN-1990
                                                                                                                                                                                                    EP414469-A.
                                                                                                                                                                                                                                                                                                                                                                                                          Simons MJ;
                            AAQ10624;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABL88901;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABL88901/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         XEXEXEX
```

; 0

Gaps

.; o

4.5%; Score 13; DB 1; Length 18; 100.0%; Pred. No. 4.38+02; tive 0; Mismatches 0; Indels

Query Match
Best Local Similarity 100.
Matches 13; Conservative

955 AGAGCCAAATTGA 967

ð

AGAGCCAAATTGA 6

18

RESULT 294

```
The sequences given in AAQ39288-303 are primers and probes which were used in a method to detect a mutation in the glucocerebrosidase gene, corresponding to an insertion of a G nucleotide adjacent to base 57 of exon 2 (see also AAQ39287 and AAQ39304). The template DNA used was isolated from peripheral blood leukocytes. Glucocerebrosidase is an enzyme which is required for the lysosomal degradation of glycolipids (see also AAQ39266). A deficiency of this enzyme leads to Gaucher disease, as in the absence of glucocerebrosidase, the extremely insoluble glucosylceramide (glucocerebroside) accumulates. The insertion of a G nucleotide adjacent to position 84 in the glucocere- brosidase cDNA has been characterised as a new Gaucher disease causing mutation. The corresponding position of this mutation in the gluco- cerebrosidase gene is in exon 2, adjacent to position 57. (Updated on 25-MAR-2003 to correct
                                                                                                                                                                                                                                                                        Screening method for new Gauche disease mutation - comprises inserting guanine nucleotide adjacent to specified position of gluco-cerebrosidase gene-exon 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mutant; polymerase chain reaction; IVS2+1; 84GG; 1226G; 1448C; screening method; detection; GC alleles; Gaucher's disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Multiple glucocerebrosidase mutation second 3' PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.5%; Score 13; DB 1; Length 20; 100.0%; Pred. No. 4.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                            Claim 25; Page 66; 74pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ48247 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92US-00841652,
                                                                 92WO-US007840
                                                                                                          91US-00767135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   843 CTGAAGACAGCGT 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SCRI ) SCRIPPS RES INST.
                                                                                                                                                       (SCRI ) SCRIPPS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGAAGACAGCGT
                                                                                                                                                                                                   Beutler E, Sorge JA;
                                                                                                                                                                                                                                             WPI; 1993-117560/14.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-FEB-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-FEB-1992;
                                                                   16-SEP-1992;
                                                                                                             27-SEP-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
16-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EP558257-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-SEP-1993.
                       01-APR-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>ы</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ48247;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Beutler
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ48247/C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention describes a collection of binding groups for a family of nucleic acids comprising members of relative high and relative low significance, where the binding groups are selected to be capable to identify, alone or in combination, essentially all members of the family of nucleic acids of relatively high significance. The collection of binding groups is useful for typing of nucleic acid in a clinical sample, by contacting the nucleic acid with the collection and determining whether one or more binding groups bound to the nucleic acid of the sample. This method is useful for determining whether the sample comprises at least a part of a member of relatively high significance of diagnosting the severity of a disease caused by a pathogen containing a member of a family of nucleic acids. The collection of binding groups is useful for dispensing the severity of a disease caused by a pathogen containing a member of a family of nucleic acids. ABL893Ty to ABL893I represent
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Collection of binding groups for determining or typing samples, especially clinical samples, has groups capable to identify essentially all members of the family of nucleic acids of relatively high significance.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glucocerebrosidase; peripheral blood leukocyte; lysosomal degradation; glycolipid; Gaucher disease; glucosylceramide; glucocerebroside; RFLP; restriction fragment length polymorphism; mutation; pseudogene; 1226G; Jewish; 1448C; polymerase chain reaction; PCR; primer; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oligonucleotide sequences used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·
0
Binding molecule, HIV-1, human immunodeficiency virus type 1; reverse transcriptase, binding group, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19 BP; 11 A; 3 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.5%; Score 13; DB 1; Le
100.0%; Pred. No. 4.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Pred. No. 4.6 iive 0; Mismatches
                                                                                                                                                                                                                                                                                                                  (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
                                                                                                                                                                                                                                                                                                                                                              Goudsmit J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 37; 166pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glucocerebrosidase gene primer #9.
                                                                        Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                               20-JUL-2000; 2000EP-00202611.
                                                                                                                                                                                                                                                                                                                                                              Van Gemen B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ39303 standard; DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        828 TGTCTCTTTCTT 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18 TGTCTCTTTTCTT 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-156696/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
nes 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                 Loukachov VV,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9306244-A1
                                                                                                                                         EP1174518-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-JUL-1993
                                                                                                                                                                                     23-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ39303;
```

Query Match

Matches

RESULT 296

g

ð

AAQ39303/

0

Gaps

0;

0; Indels

and that fragments of the above mRNA can independently regulate

sugar and that fragments of the above mRNA can mRNA accumulation in a sugar responsive manner

```
The sequence is that of the second 3' PCR primer which was used in a polymerase chain reaction amplification as part of a screening method for the detection of multiple glucocerebrosidase mutations IVS2+1, exon 2 nt 57G (84GG), exon 9 nt 2G (1226G) and exon 10 nt 60C (1448C). This method may be used for screening humans for GC alleles associated with Gaucher's disease. It can be used to diagnose either the disease itself or a heterozygous carrier state. (Updated on 25-MAR-2003 to correct PN field.)
                                                Detection of Gaucher's disease - by screening DNA for a substitution of adenine for guanine at position 1 of gluco:cerebrosidase gene intron 2.
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20 BP; 4 A; 8 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                         Disclosure; Page 13; 42pp; English.
```

```
4.5%; Score 13; DB 1; Length 20; 100.0%; Pred. No. 4.9e+02; tive 0; Mismatches 0; Indels
                                                                                  843 CTGAAGACAGCGT 855
Query Match
Best Local Similarity 100.
Matches 13; Conservative
                                                                                  ð
```

o,

Gaps

.;

BP. AAX56841 standard; DNA; 20 (first entry) N EP-916734 primer NosRT1. 14 CTGAAGACAGCGT 15-JUL-1999 AAX56841; RESULT 298 AAX56841 TIDE STATE OF THE q

alphaAMY3; rice; alpha-amylase; promoter; angiosperm; mRNA stability; cis-regulate; sugar-responsive; regeneration; regulation; plant; primer;

Oryza sativa Synthetic

EP916734-A2

19-MAY-1999

24-AUG-1998;

97US-00951718. 16-OCT-1997;

98EP-00306747.

(SINI-) ACAD SINICA

Chan M; Yu S, WPI; 1999-279907/24.

New expression vector comprising promoter capable of directing expression of a coding sequence in angiosperm cell.

Example 2; Page 8; 21pp; English.

capable of directing expression of a coding sequence in an angiosperm cell, and a 3' untranslated region of a rice alpha-amylase gene where after the coding sequences is inserted into the vector, the 3' untranslated region and the coding sequence are transcribed into a single mRNA. 3' untranslated regions of rice alpha-amylase gene can cis-regulate especially for gene expression regulation in plants, responsive manner especially for gene expression regulation in plants, respensating tissue or even regenerating a whole plant. The full length 3' untranslated region of a rice alpha-amylase gene (alphaAMY3) enhances mRNA stability in the absence of sugar and promotes mRNA degradation in the presence of This invention describes a novel expression vector comprising a promoter

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HLA)-A, HLA-B, or HLA-C alleles using defined primer sets, useful for subtyping or typing of HLA Class I alleles.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a method for the locus-specific, separate amplification of exon 2, exon 3, and/or exon 4 of human leukocyte antigen (HIA) -A, HIA-B, or HIA-C alleles. The method is useful for subtyping of typing of HIA class I alleles. The present sequence is an amplification primer used in the method
                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                        Reverse primer #108 used for amplification of HLA-A exon 3.
                                                               4.5%; Score 13; DB 1; Length 20; 76.5%; Pred. No. 4.9e+02; Live 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.5%; Score 13; DB 1; Length 20; 100.0%; Pred. No. 4.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                     Sequence 20 BP; 6 A; 4 C; 4 G; 4 T; 0 U; 2 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 20 BP; 4 A; 6 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                    HLA-A; HLA-B; HLA-C; typing; primer; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%; Preq. .v..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ξ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 40; 128pp; English.
                                                                                                                   720 GAGTGACTCTGGTCATA 736
                                                                                                                                 | | |||||||::||||||
1 GCGGGACTCTSSTCATA 17
                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAS96597 standard; DNA; 20 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                       05-APR-2000; 2000WO-EP002998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99EP-00870068.
99US-0138614P.
                                                                                                                                                                                             AAC80280/c
ID AAC80280 standard; DNA; 20
                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           718 GAGAGTGACTCTG 730
                                                                                        Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 100.
18s 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rombout A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (INNO-) INNOGENETICS NV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 GAGAGTGACTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-647426/62.
                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                   WO200061795-A2.
                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-APR-1999;
11-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  De Canck I,
                                                                                                                                                                                                                                                               03-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                             19-0CT-2000.
                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                       AAC80280;
                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAS96597;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS96597/cID AAS9cXX
                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                        2000
                                                                                                                                          q
                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
```

```
The invention describes a compound, 8-50 mucleobases in length targeted to a nucleic acid molecule encoding human TERT (telomerase reverse transcriptase), where the compound specifically hybridises with and inhibits the expression of TERT. A series of oligonucleotides were designed to target different regions of the human TERT RNA. These were 20 nucleotides in length and composed of a central gap region consisting of the nucleotide wings. The wings were composed of 2' methoxyethyl (2'-MOE) nucleotide wings. The wings were composed of 2' methoxyethyl (2'-MOE) nucleotide wings. The variance transcriptase (RT)-polymerase chain reaction (PCR). The compound is useful for inhibiting the expression of TERT in cells or tissues, for treating a human having disease or condition associated with TERT, for modulating apoptosis, for inhibiting cell growth (preferably, cancer cell growth), in antisense therapy and for diagnostics and therapeutics. This sequence is an antisense oligonucleotide used to modulate the activity of nucleic acid molecules
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New compound targeted to nucleic acid molecule encoding telomerase transcriptase (TERT), which specifically hybridizes with and inhibits expression of TERT, useful for modulating apoptosis and inhibiting cell
                                                                        Telomerase reverse transcriptase, TERT, cytostatic, apoptosis, cell growth inhibitor, antisense oligonucleotide, antisense technology,
                                Telomerase reverse transcriptase, antisense oligonucleotide #11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       encoding TERT, described in the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 20 BP; 6 A; 10 C; 4 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                Wancewicz E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 13; Page 85; 154pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM,
                                                                                                                                                                                                                                                                                              15-MAY-2001; 2001WO-US015774
                                                                                                                                                                                                                                                                                                                                     16-MAY-2000; 2000US-00572423
07-DEC-2000; 2000US-00733294
  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaarde WA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-075321/10.
                                                                                                                                                                                                                    WO200188198-A1.
                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                        07-DEC-2000;
09-APR-2002
                                                                                                                                                                                                                                                           22-NOV-2001
                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                      Monia BP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  growth
```

```
.;
0
                                 Gaps
                                 ..
Score 13; DB 1; Length 20; Pred. No. 4.9e+02;
                               0; Indels
                                 Mismatches
 Query Match
Best Local Similarity 100.0%; Pr
Matches 13; Conservative 0;
                                                                 818 GGGTTGGCTGTGT 830
```

.. 0

BP. ABI95316 standard; DNA; 20 7 degridecrerer 19 RESULT 301 g

ð

Capture oligonucleptide Zip ID#2403 oligo #9. (first entry) 16-FEB-2002 ABI95316; 

Human; K-ras; PCR primer; probe; capture probe; mutation detection;

The present invention describes a method (MI) for despitation describes a method (MI) in present invention describes a method (MI) in the describing temperatures within a narrow trange. The method is useful of or detecting infectious diseases caused by bacterial infectious agents of for detecting infectious diseases caused by bacterial infectious agents of a Salmonella, Listeria monocytogenes and Haemophilus influenza, fungal infectious agents of Cryptococcus neoformans, Candida albicans and special infectious agents of Cryptococcus neoformans, Candida albicans and compensional fundatures, viruses e.g. T-cell lymphocytotrophis cirus, Epstein-Barr virus and polio virus, and parasitic infectious agents selected from Onchoverva volvulus, Entamoeba histolytica and Dracunculus consists. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obssity defects.

CC Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amphilitation, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCA1 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring for environmental monitoring cand the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the computer of particular sites and identifying if ligation of the oligonucleotide probe sets occurred and correlating (using a computer) identified ligation to a presence of the target uncleotide sequences. AB182074 to ligase detection reaction, LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome; obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss. Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch. Gaps The present invention describes a method (M1) for designing capture . 0 Human; antisense; lung dysfunction; nasal airway dysfunction; 4.5%; Score 13; DB 1; Length 20; 100.0%; Pred. No. 4.9e+02; ive 0; Mismatches 0; Indels Kliman R; Sequence 20 BP; 4 A; 7 C; 6 G; 3 T; 0 U; 0 Other; Favis R, Example 5; Fig 29; 300pp; English. Human oligonucleotide sequence. Gerry NP, BP. (CORR ) CORNELL RES FOUND INC. 04-APR-2001; 2001WO-US010958. 14-APR-2000; 2000US-0197271P ABZ90109 standard; DNA; 20 712 TCCCAGGAGAGTG 724 (first entry) Query Match Best Local Similarity 100." Matches 13; Conservative TCCCAGGAGAGTG 13 the present invention Zirvi M, WPI; 2002-034366/04 WO200179548-A2 17-0CT-2003 25-OCT-2001. Barany F, Synthetic. ABZ90109; RESULT 302 ABZ90109, Z X E X E X S X X X X 8 음

Specific; cleavage; target RNA; protein; prophylaxis; expression; inhibitor; inhibition; ribozyme; treatment; prevention; psoriasis; asthma; inflammatory diseases; restenosis; cardiovascular condition; hypertension; arthritis; ss.

92US-00916763. 92US-00987132. 92US-00989848. 92US-00989849.

07-DEC-1992;

07-DEC-1992;

(RIBO-) RIBOZYME PHARM INC

19-JAN-1993;

Katz E, Pabalan J, Aguilar D;

93WO-US006316

02-JUL-1993;

03-FEB-1994.

WO9402595-A1

Synthetic

```
The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonuclectide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nuclectides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or mallignant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing levels of denosine of, or reducing sensitivity to adenosine, reducing levels of defension lung antifarmation, lung allergies, or a respiratory disease or condition, lung allergies, or a respiratory disease or condition.

Note: The sequence data for this patent is not represented in the printed security in the was obtained in electronic format directly from WIPO or the control or the patent of the control or the cont
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                        antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.
antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.5%; Score 13; DB 1; Length 20; 100.0%; Pred. No. 4.9e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 20 BP; 4 A; 3 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 5351; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Li Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
                                                                                                                                                                                                                                                                                                                                                                          24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                                                                                                                                   23-APR-2002; 2002WO-US013135.
                                                                                                                                                                                                                                                                                                                                                                                                                            (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTCCAGAGAATT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCTCCAGAGAATT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-229219/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                          WO200285308-A2
                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                    31-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nyce JW, 1
Miller S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ57220/c
ID AAQ57
XX
AC AAQ5′
XX
DT 25-M
DT 26-JI
XX
XX
XX
XX
XX
XX
XX
g
```

```
This is a stromelysin mRNA target sequence (nucleotide no. 725) of an enzymatic RNA molecule (ribozyme) which cleaves mRNA associated with the development or maintenance of osteoarthritis or other pathological conditions which are mediated by metalloproteinase activation. The concn. of the ribozyme necessary to effect a therapeutic treatment is lower than that of an antisense oligonucleotide and the specificity of action is higher. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                        Enzymatic RNA molecules which cleave mRNA - used to treat or prevent inflammatory, arthritic, stenotic or cardiovascular diseases or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hammerhead ribozyme motif; arthritis; cancer; angiogenesis; hairpin; hepatitis delta virus; group 1 intron; RNAse P RNA; stromelysin; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.4e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 6 A; 7 C; 2 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hammerhead ribozyme target sequence #16.
                                                                                                                                                                                                                                                                                                                                                       Claim 3; Page 18; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      815 TCAGGGTTGGCTGTGT 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94WO-US013129.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         93US-00152487.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 rcagrerredereagr 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ93477 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                            Draper KG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (revised)
                                                                                                                                                                                                                                                                                   WPI; 1994-048853/06,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                         Sullivan SM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                409513380-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-MAR-2003
06-DEC-1995
                                                                                                                                                                                                                                                                                                                                  conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ93477;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ93477,
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
```

·.

Gaps

; 0

Indels

Enzymatic RNA molecule stromelysin mRNA target sequence.

(revised)
(first entry)

25-MAR-2003 26-JUL-1994

AAQ57220;

BP

AAQ57220 standard; mRNA; 17

0;

```
T, Draper K, Pavco P;
Wincott F, Matulic-Adamic J;
Burgin A;
                                                                                                                                                          Sequence 17 BP; 6 A; 7 C; 2 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                      Human stromelysin hammerhead target SEQ ID NO:16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Usman N,
Modak A,
                     Mcswiggen J,
                                                                         Disclosure; Page 18; 70pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                             94US-00354920.
94US-00363253.
94US-00363254.
95US-00390850.
95US-00426124.
                                                                                                                                                                                                       815 TCAGGGTTGGCTGTGT 830
                                                                                                                                                                                                                                                          AAX63384 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95US-0000951P
                                                                                                                                                                                                                                                                                                                                                                                                               95WO-US015516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95US-00432874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95US-00434509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95US-00541365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .00512861
                                                                                                                                                                                                                       N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gustofson J,
Thompson JD,
      (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                       TCAGTGTTGGCTGAGT
                                                                                                                                                                        Query Match
Best Local Similarity 87.5
Matches 14; Conservative
                     Draper KG, Pavco P,
                                   WPI; 1995-194099/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Beigelman L,
Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                                                                                                                                                                      diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                  WO9618736-A2
                                                                                                                                                                                                                                                                                                                                                                                                                 22-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                      23-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                              23-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-APR-1995
02-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-MAY-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-OCT-1995
                                                                                                                                                                                                                                                                                         20-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                  20-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -JUL-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JUL-1995
                                                                                                                                                                                                                                                                          AAX63384;
                                                                                                                                                                                                                      17
                                                                                                                                                                                                                                              RESULT 305
                                                                                                                                                                                                                                                     AAX63384/c
                                                                                                                                                                                                                                                                                                                                                                     Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07
                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                       g
```

```
The present invention describes a novel enzymatic nucleic acid (ENA)

can having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues

can inhibit a 2'-C-allyl modification at position 4 of the ENA; (iii) at least

can inhibit collagenase and stromelysin production in the synovial

can inhibit collagenase and stromelysin production in the synovial

can inhibit collagenase and stromelysin production in the synovial

can inhibit collagenase and stromelysin production of arthritis.

CC particularly osteoarthritis or rheumatoid arthritis. The ENA's can also

be used to treat antigen presenting cells of a donor to induce tolerance

con a maloantigen of a donor. They can also be used for

chancing graft tolerance or for treating autoimmune disease, and for

creating allergies and other inflammatory conditions. The ENA's can also

consequing allergies and other inflammatory conditions. The ENA's can also

consequing allergies and other inflammatory conditions of the expression of

stromelysin without introducing the non-specific effects upon gene

concentration of ribozyme required to affect a therapeutic treatment

concentration present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Omega-conotoxin; conus; Conus magus; alpha-conotoxin; mu-conotoxin; nicotinic acetylcholine receptor; venom; skeletal muscle; inhibitor; sodium ion channel; presynaptic neuronal calcium ion channel; therapy; P-like subtype; N-type channel; respiratory rhythm; respiratory control; neural devalopmental syndrome; respiratory crisis; probe;
                                                      nucleic acid molecules having a hammer-head motif - used for ment of arthritis, induction of graft tolerance or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        / Match 4.4%; Score 12.8; DB 1; Length 17; Local Similarity 87.5%; Pred. No. 4.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 6 A; 7 C; 2 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lambert-Eaton myasthenic syndrome; ss.
                                                                                                                                                            Example 1; Page 139; 307pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Probe DHOG-57 for omega-conotoxin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGGGTTGGCTGTGT 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AATS9750 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rcagrerrescreagr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                               auto-immune diseases
                 WPI; 1996-300653/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present invention
                                                                                           treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US5591821-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                   Enzymatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT59750;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAT59750/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                 The sequences AAQ93462-Q93494 are examples of target cleavage sequences for a hammerhead ribozyme with sequence motif AAQ90451. A ribozyme, pref. hammerhead, hairpin, hepptitis delta virus, group 1 intron or RNAse P RNA motif can be used in a composition for the treatment of arthritis, cancer or angiogenesis. The ribozyme comprises between 5-45 bases complementary to the target mRNA. The ribozymes (see AAQ93830-51 for examples) were synthesised based on putative stromelysin mRNA target cleavage sequences (AAQ93496-Q93829). (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; humman; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimnune disease; allergy; inflammation;
                                                                                                                                                                 New enzymatic RNA molecules - which cleave mRNA of a gene encoding a matrix metalloproteinase, for treating arthritis, cancer or angiogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.4e+02; trive 0; Mismatches 2; Indels
                                                                       Gustofson J;
```

Gaps

. 0

2; Indels

New omega-conotoxin peptide(s) - which target P-type and N-type calcium

Hillyard DR;

Olivera BM,

Imperial JS,

Monje VD,

(UTAH ) UNIV UTAH.

WPI; 1997-086679/08

93US-00092215. 93US-00092215

16-JUL-1993; 16-JUL-1993;

07-JAN-1997.

```
ion channels, used for distinguishing calcium channels or for diagnosis.
                                                                        Example 1; Col 11; 21pp; English
```

This sequence represents a probe for the omega-conotoxins of Conus magus.
This sequence was based on a fragment of the conotoxins MVIIA and MVIIB,
to isolate the MVIIC conotoxins of the invention (see AAM12804).
Comus venom contains three types of disulphide rich peptides, these are the alpha-conotoxins mu-conotoxins and omega-conotoxins. The alphaconotoxins target and block the nicotinic acetylcholine receptors, the mu-conotoxins target and block the presynaptic neuronal calcium conotoxins target and block the presynaptic neuronal calcium conotoxins target and block the presynaptic neuronal calcium con channels. The omega-conotoxin peptides of the invention can target plike subtypes of calcium ion channels, as well as the N-type channels of cistinguishing them from previously known omega-conotoxins). The peptide sequences can also be used for distinguishing the types of calcium ion channels. The presence of sites for the peptides can be determined in tissue sections, thereby characterising calcium ion channel expressing cells into various types. As the conotoxin peptides affect the canotomities in respiratory control which are particularly severe in the neonatal period. The peptides can also be used for assessing neural developmental syndromes that result in respiratory crisis, and can be conserved.

Sequence 17 BP; 6 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

```
.
0
4.4%; Score 12.8; DB 1; Length 17; 37.5%; Pred. No. 4.4e+02; lve 0; Mismatches 2; Indels
                                                           727 TCTGGTCATAGGACTT 742
              87.5%;
                                                                                        17 rcardrcaraddacrr 2
              Local Similarity 87.5
nes 14; Conservative
Query Match
                 Best Loca
Matches
                                                            ð
                                                                                        셤
```

ö

Gaps

AAA18464 standard; RNA; 17 BP 19-JUN-2000 (first entry) AAA18464; RESULT 307 AAA18464 

Human TIE-2 substrate sequence SEQ ID NO:1690.

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

Homo sapiens

WO9950403-A2

98US-0079678P 27-MAR-1998;

99WO-US006507.

24-MAR-1999;

(RIBO-) RIBOZYME PHARM INC.

WPI; 1999-591315/50.

Novel ribozymes for modulating the synthesis, expression and/or stability

Mcswiggen JA;

Coeshott C,

Jarvis T,

Roberts E,

Pavco PA,

```
The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNY) gene, an integrin subunit bete 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17661 to AAA1762 represent ribozyme sequences for ANTY, corresponding target sequences, AAA17684 represent their corresponding target sequences, AAA19154 represent ribozyme sequences, AAA19154 represent ribozyme sequences, C. AAA19154 represent ribozyme sequences, AAA19154 represent ribozyme sequences, AAA19221 to AAA21922 represent their corresponding target sequences; C. AAA19223 to AAA2022 represent their corresponding target sequences; AAA15223 to AAA21689 to AAA21680 and AAA21680 to AAA21680 to AAA21680 to AAA21680 and AAA21680 to AAA21680 to AAA21680 to AAA21680 to AAA21680 to AAA21680 and AAA21680 to AAA21840 to AAA21840 to AAA21840 to AAA21840 to AAA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
target; substrate; catalyst; modulation; expression; Raf gene; delivery;
screening; identification; synthesis; deprotection; purification; cancer;
inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
restenosis; rhumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.4%; Score 12.8; DB 1; Length 17; 81.2%; Pred. No. 4.4e+02; tive 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 4 A; 2 C; 9 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human C-raf target site nucleotide position 1800.
of an mRNA encoding an angiogenic factors.
                                            Claim 56; Page 96; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           707 GCGAGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAV91206 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0051718P.
97US-0056808P.
97US-0061321P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97US-0061324P.
97US-0064866P.
97US-0068212P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          decadenceaddada 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98WO-US009249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97US-0049002P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-0046059P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cuc., ...
Best Local Similarity
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-AUG-1997;
02-OCT-1997;
02-OCT-1997;
05-NOV-1997;
19-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9850530-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-JUN-1997
03-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV91206;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV91206
ò
```

0

Bellon L;

```
WPI; 1999-009494/01.
                                                           Best Local Similarity
                                                                                19-JUL-2000
    Jarvis T,
                                                                             AAA25680
                                                         Query Match
                                                            Matches
                                                                        AAA25680
8
                                                                  g
```

The present invention describes nucleic acids (A) that interact stably with a target sequence and contain at least one phosphoro(di)thioate with a target sequence and contain at least one phosphoro(di)thioate with a target sequence and contain at least one phosphoro(di)thioate link, having endonuclease activity. (A), and more generally any catalytic nucleic acid (A') that modulates expression of the oestrogen receptor contains or transforming cells as vivo and implanting treated cells, or for other conditions associated with levels of oestrogen receptor.

CC genuse of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, correlate inhibition of gene expression with alterations in phenotype, correlate inhibition of gene expression with alterations in phenotype, correlate inhibition of gene expression with alterations in (A) improves reagents (for RNA, in the same way that restriction endonucleases are used with DNA). The combination of modifications in (A) improves the captering to AAA21015 represent oestrogen receptor hairs incomparate sequences.

CC AAA2474 represent oestrogen receptor hairspin ribozyme sequences.

CAAA2474 and AAA26105 represent their corresponding target sequences and sequences.

CC AAA2593 to AAAA26105 represent their corresponding target sequences and antisense oligonucleotides used in the exemplification of the present Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss. New nucleic acids that interact, and optionally cleave, target sequences, 4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.4e+02; Live 0; Mismatches 2; Indels Beigelman L, Mcswiggen JA, Karpeisky A, Zwick M, Jarvis T, Woolf T, Haeberli P; Sequence 17 BP; 0 A; 3 C; 4 G; 10 T; 0 U; 0 Other; Single nucleotide polymorphism PCR primer #1434. Claim 77; Page 87; 148pp; English. BP 823 GGCTGTGTCTCTTTTC 838 30-MAR-2000; 2000WO-US008440. AAC72321 standard; DNA; 17 (first entry) (RIBO-) RIBOZYME PHARM INC Grerererrerre 14; Conservative used to treat cancer. WPI; 2000-013248/01. Best Local Similarity Matulic-Adamic J; WO200058519-A2. Homo sapiens Thompson JD, 09-FEB-2001 05-0CT-2000. invention AAC72321; Query Match 310 Matches AAC7232 RESULT 셤 EX PARK PRODUCE SON TO SERVE SO NAME OF COORDINATION OF STREET AND A STREET ð A method has been developed for the identification of a nucleic acid
capable of modulating a process in a biological system. The method
capable of modulating a process in a biological system. The method
comprises: (a) introducing into the system a random library of nucleic
confidence and a catalytic domain (CD); and (b) identifying NAC
a random sequence, and a catalytic domain (CD); and (b) identifying NAC
in systems where modulation has occurred and/or determining the sequence
of at least part of the SBDs in such systems. Nucleic acid molecules with
condonuclease activity and catalytic activity, from the present invention,
care used to modulate gene expression in plant and mammalian cells and to
cleave target nucleic acid, particularly for treating systemic diseases
caused by specific RNA, e.g. cancer, inflammation, psoriamis, non-hepptic
ascites and infection. They may also be used to detect genetic drift and
cutations in diseased cells and to determine c-raf RNA. Specifically NACs
with RNA-cleaving activity that modulate expression of the Raf gene, are
used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or
generally any condition associated with the level of c-raf. Introduction
of sugar/phosphate modifications increases stability against nuclease and
activity. AAV90922 to AAV3877 represent NACs that can be used in the
cativity. AAV90922 to AAV3877 represent NACs that can be used in the ó Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2178. Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide; gene expression modification; cancer; phosphorothioate; endonuclease; anticencer; breast cancer; endometrium cancer; ss. Gaps . 0 Bellon L; Burgin A; 4.4%; Score 12.8; DB 1; Length 17; 62.5%; Pred. No. 4.4e+02; rive 4; Mismatches 2; Indels Kisich K, Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Thompson J, Workman CT, Beaudry A, Sweedler D; Sequence 17 BP; 5 A; 4 C; 2 G; 0 T; 6 U; 0 Other; used as antiviral agents and synthons. Claim 177; Page 150; 259pp; English. 909 GATCAGATTATCATCA 924 AAA25680 standard; DNA; 17 BP. 1 GAUCAGAUCAUCUUCA 16 (RIBO-) RIBOZYME PHARM INC. (first entry) 10; Conservative

.

Gaps

; 0

Daley GQ, Ireland JS, Lander ES;

Cargill M,

Altshuler D,

98US-0082404P. 99WO-US008547,

19-APR-1999; 20-APR-1998; 23-JUN-1998;

28-OCT-1999

Homo sapiens WO9954459-A2 (WHED ) WHITEHEAD INST BIOMEDICAL RES

(AFFY-) AFFYMETRIX INC

99US-0127248P.

31-MAR-1999;

<u>ц</u>

Sklar

Patil N,

```
WPI; 2000-611722/58
Lipshutz RJ,
```

```
The present invention is concerned with a number of human single nucleotide polymorphisms (SNPs) which the inventors identified in human genes. These SNPs can be used in disease diagnosis and prediction of an individual's susceptibility to disease, in forensic and paternity testing and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovascular, endocatine and neurological systems, such as coronary artery disease, schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 4 A; 3 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                       Claim 8; Fig 5; 214pp; English
                                                                                                                                                                          genetic analysis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diseases
```

```
;
4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.4e+02; live 0; Mismatches 2; Indels
                                               724
                                                                      17
                                              709 GAGTCCCAGGAGAGTG
                                                               GGGCCCAGGAGAGTG
                        Conservative
          Local Similarity
                        14;
                                                                    0
Query Match
                       Matches
                                                                  g
                                              ð
```

ö

Gaps

Single nucleotide polymorphism PCR primer #1428. AAC72312 standard; DNA; 17 BP (first entry) 09-FEB-2001 AAC72312; RESULT 311 AAC72312
XX
AC72312
XX
AC72312
XX
AC72312
XX
AC72312
XX
AC72312
XX
AC72312
AC7

Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.

sapiens Homo

WO200058519-A2.

05-0CT-2000

30-MAR-2000; 2000WO-US008440.

(WHED ) WHITEHEAD INST BIOMEDICAL RES (AFFY-) AFFYMETRIX INC. 99US-0127248P. 31-MAR-1999;

Lander ES Ireland JS, g G , Daley G Sklar P; Cargill M, Patil N, 8 Altshuler D, Lipshutz RJ,

WPI; 2000-611722/58.

Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and genetic analysis

nucleotide polymorphisms (SNPs) which the inventors identified in human genes. These SNPs can be used in disease diagnosis and prediction of an individual s susceptibility to disease, in forensic and paternity testing and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovascular, endocrine and neurological systems, such as coronary artery disease, schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's

The present invention is concerned with a number of human single nucleotide polymorphisms (SNPs) which the inventors identified in human

Claim 8; Fig 5; 214pp; English.

genetic analysis.

Nucleic acid selected from one of 106 genes comprising single nucleotide polymorphisms, allele-specific oligonucleotides to the genes are useful for phenotypic correlations, forensics, paternity testing, medicine and

WPI; 2000-611722/58.

Claim 8; Fig 5; 214pp; English.

The present invention is concerned with a number of human single nucleotide polymorphisms (SNPs) which the inventors identified in human

ö

Gaps

; 0

4.4%; Score 12.8; DB 1; Length 17; ilarity 87.5%; Pred. No. 4.4e+02; Conservative 0; Mismatches 2; Indels

Query Match Best Local Similarity

14;

Matches

Sequence 17 BP; 4 A; 3 C; 9 G; 1 T; 0 U; 0 Other;

```
.
0
                  testing
                                                                                                                                                                                                                                                                                                                                               Single nucleotide polymorphism; SNP; human; genetic disease; disease susceptibility; cardiovascular system; endocrine system; neurological system; forensic testing; paternity testing; PCR primer; ss.
genes. These SNPs can be used in disease diagnosis and prediction of an individual's susceptibility to disease, in forensic and paternity testin and in genetic mapping. In particular, the SNPs of the invention can be used to diagnose susceptibility to diseases of the cardiovascular, endocrine and neurological systems, such as coronary artery disease, schizophrenia, cancer, autoimmune diseases, Alzheimer's and Parkinson's
                                                                                                                                                Gaps
                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ireland JS, Lander ES;
                                                                                                                      4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.4e+02; ive 0; Mismatches 2; Indels
                                                                                             Sequence 17 BP; 4 A; 3 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                         Single nucleotide polymorphism PCR primer #1418.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cargill M, Daley GQ,
Patil N, Sklar P;
                                                                                                                                                                      724
                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                          2 GGGGCCCAGGAGTG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAR-2000; 2000WO-US008440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-0127248P
                                                                                                        Query Match
Best Local Similarity 87.5%,
'.hos 14; Conservative
                                                                                                                                                                                                                                                  AAC72297 standard; DNA; 17
                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                   709 GAGTCCCAGGAGAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (WHED ) WHITEHEAD INST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                                                                                                                      WO200058519-A2
                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Altshuler D,
Lipshutz RJ,
                                                                                                                                                                                                                                                                                                  09-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                              05-OCT-2000.
                                                                                                                                                                                                                                                                           AAC72297;
                                                                         diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (AFFY-)
                                                                                                                                                                                                                             312
                                                                                                                                                                                                                             RESULT
                                                                                                                                                                                                                                                               8888888888888
                                                                                                                                                                   à
                                                                                                                                                                                        g
```

ONAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;

ð 셤

```
MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke, dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
          B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia;
human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint Kinase-1 (Chk1) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chk1 levels, including cancer. The present sequence is an oligonucleotide described in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                   checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Holman PS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.4e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 4 A; 1 C; 7 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Booher RN,
                                                                                                                                                                                                         Human Chkl ribozyme substrate SEQ ID NO: 828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            including cancer. The present sequenc
the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 70; 115pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                    AAH95403 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                     02-FEB-2001; 2001WO-US003504.
                                                                                                                                                                                                                                                                                                                                                                                                 03-FEB-2000; 2000US-0179983P.
                  709 GAGTCCCAGGAGAGTG 724
                                     GGGCCCAGGAGAGTG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                            RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14; Conservative
                                                                                                                                                                                                                                                    RNA cleavage; cancer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                             FATTAEY A R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-496922/54.
                                                                                                                                                                              (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                            WO200157206-A2.
                                                                                                                                                                                                                                                                                  Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fattaey AR,
                                                                                                                                                                                                                                                                                                                                       09-AUG-2001
                                                                                                                                                                              09-OCT-2001
                                                                                                                                                 AAH95403;
                                               N
                                                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-)
                                                                                                                                                                                                                                        Human;
                                                                                                       AAH95403,
```

and

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,

Claim 30; Page 159; 200pp; English. central nervous system injury.

Chowrira BM;

Blatt L, Mcswiggen J,

WPI; 2001-607195/69

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P.

RIBOZYME PHARM INC.

(RIBO-) (BLAT/) (MCSW/) (CHOM/)

BLATT L. MCSWIGGEN J. CHOWRIRA B M.

09-FEB-2001; 2001WO-US004273

WO200159103-A2.

16-AUG-2001

sapiens.

Ношо

Synthetic.

The invention relates to a nucleic acid molecule which down regulates corpusession of a CD20 gene and a nucleic acid molecule which down reguression of a neurite growth inhibitor gene (NGGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a merzyme (cleaving RNA with an NGM motif) a zinzyme (cleaving RNA with a NGM triplet), a zinzyme (cleaving RNA with a NGM triplet), a zinzyme (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably MG² +. CC CD20 in the presence of a divalent cation that is preferably MG² +. CC FCD20 in the presence of a divalent cation that is preferably MG² +. CC FCD20. The treatment may further comprise the use of one or more creat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (MLD), bulky low-grade or follicular non-Hodgkin's lymphoma (MLD), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCD), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immunocytoma (IMC), small B-cell lymphocytic lymphocytic cc targetting nucleic acid may be contacted with a cell to reduce NOGO activity of the nucleic acid may be contacted with a cell to reduce NOGO activity of the contacted with a contacted with a coll acid was of one or more coll and treat a patient having a condition associated disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a DNAzyme molecule of the invention

796 CCAAGAGCTCTCCTCC 811

ð g

CAAAAGCTCTCCTCC

16

ABK03560 standard, RNA; 17 BP

(first entry)

12-MAR-2002

ABK03560;

Human CD20 DNAzyme #14.

Sequence 17 BP; 4 A; 3 C; 5 G; 0 T; 5 U; 0 Other;

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;

```
Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; notropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NGC0; hammerhead ribozyme; DNAzyme; clozyme; d-cleaver; amberzyme; linzyme; lymphoma; leukaemia; human immunodeficiency virus; HIV associated NHL; lymphoma; lukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheiner's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a possessing an NCH motif), a G-cleaving RNA with a NYM motif) pr an amberzyme (cleaving RNA with an NNY motif) pr an amberzyme (cleaving RNA with an NNY motif) pr with a YGY motif). The CD20-targetting nucleic acid is used to cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif) with an YGY motific acid is used to cleave RNA Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more
                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, central nervous system injury.
                                                 ;
0
    4.4%; Score 12.8; DB 1; Length 17; 17.5%; Pred. No. 4.4e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 88; Page 94; 200pp; English.
                                                                                 844 TGAAGACAGCGTCCTG 859
Query Match
Best Local Similarity 87.5%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-FEB-2001; 2001WO-US004273
                                                                                                                        N
                                                                                                                                                                                                                        ABK01724 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RIBOZYME PHARM INC.
                                                                                                                      TGAAGACATCCTCCTG
                                                                                                                                                                                                                                                                                                  12-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                           Human NOGO Zinzyme #46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Blatt L, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BLATT L.
MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-607195/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-AUG-2001
                                                                                                                                                                                                                                                             ABK01724;
                                                                                                                      17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MCSM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CHOM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BLAT/)
                                                                                                                                                                                  RESULT 315
                                                                                                                                                                                                      ABK01724/
                                                                                                                                                                                                                      ð
```

```
.
0
therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-leukaemia, Brymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (NCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NoGO-presence of a divalent cation that is preferably MG2*. Furthermore, the nucleic acid may be contacted with a cell to reduce NoGO activity of the NoGO-matera a patient having a condition associated with the level of NoGO. The treatment may further comprise the use of one or more
                                                                                                                                                                                                                                      therapies. In particular, the NGGO-tergetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CNA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; d-cleaver; amberzyme; zinzyme; lymphoma; letkaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic letkaemia; human immunocyfenia; IHV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaemia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA, Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 / Match 4.4%; Score 12.8; DB 1; Length 17; Local Similarity 87.5%; Pred. No. 4.4e+02; les 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 11 A; 1 C; 4 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                             sequence is a zinzyme molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABK00771 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 891 TTACTTCTCAGCTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 rrrrrrradaderrer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human NOGO Inozyme #41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLATT L.
MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MCSM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BLAT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABK007
      88888888888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a
```

Chowrira BM;

Mcswiggen J,

Blatt L,

```
The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGOD). The regulates expression of a neurite growth inhibitor gene (NGOD). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving an RNA motif) prosessing an NGH motif), a G-cleaver (cleaving RNA with a NYM motif) prosessing an NGH motif), a G-cleaver (cleaving RNA with a NYM motif) prosessing an NGH motif), a G-cleaver (cleaving RNA with a NYM motif) prosessing an NGH motif), a divalent cation that is preferably Mg<sup>2</sup>/+.

Cof CD20 in the presence of a divalent cation that is preferably Mg<sup>2</sup>/+.

Cof CD20. The treatment may further comprise the use of one or more cof CD20. The treatment may further comprise the use of one or more cof CD20. The treatment may further comprise the use of one or more creat lymphoma, laukaemia, H2 (human immunodeficiency virus) associated with the level cortargement, a lymphoma (NCI), immunocytoma (NCI), small B-cell lymphocytic lymphoma, cortargetting nucleic acid is used to cleave RNA of the NCOC cargetting nucleic acid may be contacted with a cell to reduce NOGO activity of the cortargettent may further comprise the use of one or more cell and treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNA, stroke), Alzheimer's disease, dementia, multiple sclerosis (ALS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), chemotherapy-induced neuropathy, and/or other neuropathy and/or other neuropat
                                                                                 Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               which respond to the modulation of NOGO expression. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disease, muscular dystrophy, and/or other neurodegenerative disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sequence is an inozyme of the invention
                                                                                                                                                                                                                                                  Claim 88; Page 78; 200pp; English.
                                                                                                                                                                                          central nervous system injury.
                                WPI; 2001-607195/69.
```

. 4.4%; Score 12.8; DB 1; Length 17; 75.0%; Pred. No. 4.4e+02; ative 2; Mismatches 2; Indels Sequence 17 BP; 3 A; 9 C; 1 G; 0 T; 4 U; 0 Other; Query Match
Best Local Similarity 75.09
Matches 12; Conservative

Gaps

ð

ABL92157 standard; cDNA; 17 BP. (first entry) 30-MAY-2002 ABL92157; RESULT 317 ABL92157 

Long human Tumour Endothelial Marker SEQ ID NO 323.

Human; mouse; rat; TEM; tumour endothelial marker; NEM; PEM; cytostatic; normal endothelial marker; pan-endothelial marker; immunostimulant; antiangiogenic; tumour; neoangiogenesis; vascularised tumour; polycystic kidney disease; diabetes; retinopathy; rheumatoid arthritis; psoriasis; ss.

Homo sapiens.

WO200210217-A2

```
The invention relates to an isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumour endothelial marker (TEM) protein selected from ABB90732, ABB90740, ABB90740, ABB90740, ABB90740, ABB90740, ABB90740, ABB90740, ABB90740, ABB90749, They are useful for inhibiting tumour growth, neoangiogenesis in subjects bearing a vascularised tumour, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis and psoriasis Human, mouse and rat TEM genes and the encoded proteins (ABL92075-ABL92141 and ABB90721-ABB90789) are disclosed, as are marker oligonucleotide sequences: tumour endothelial markers (TEM) ABL91996-ABL92014; and ABL92191; normal endothelial markers (TEM) ABL92092-ABL92074; and pan-endothelial markers (PEM) ABL92092-ABL92074; and pan-endothelial markers oligonucleotide marker useful to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human, genome-derived myosin-like protein 1, GDMLP-1, hGDMLP-1, heart, muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                          An isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumor endothelial marker (TEM) protein, useful for inhibiting tumor growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:227.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match

4.4%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 6 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                           St Croix B, Kinzler KW, Vogelstein B;
                                                                                                                                                                                                                                                                                                                  Disclosure; Page 319; 331pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0207456P.
2000US-0234687P.
2000US-0236359P.
2000GB-00024263.
2001WO-US000661.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               706 AGCGAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAY-2001; 2001WO-US016981
                                                                02-AUG-2000; 2000US-0225599P.
11-AUG-2000; 2000US-0224360P.
11-APR-2001; 2001US-0282850P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 AGTGAGACCCAGGAGA 17
                                 01-AUG-2001; 2001WO-US024031.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABN00235 standard; DNA; 17
                                                                                                                                          (UYJO ) UNIV JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                             WPI; 2002-291856/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-MAY-2000; 2
21-SEP-2000; 2
27-SEP-2000; 2
04-OCT-2000; 2
30-JAN-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-DEC-2001
07-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABN00235;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABN00235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

ö

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polymuclectide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 nucleic acids in samples, as amplification substrates, to protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as the respective supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromsome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence and the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed continued the continued continued the continued of the printed continued the continued continued the continued continued the continued continued the continued continued continued the continued 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                          Hanzel DK, Rank DR, Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; SEQ ID NO 227; 214pp; English.
                       2001WO-US000663.
2001WO-US000664.
2001WO-US000665.
2001WO-US000666.
2001WO-US000666.
                                                                                                                                                                    2001WO-US000669.
2001WO-US000669.
2001WO-US000670.
2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                          Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                    (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-179446/23.
                       30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 3
30-JAN-2001; 3
30-JAN-2001; 3
                                                                                                                                                                                                                                                        05-FEB-2001;
                                                                                                                                                                                                                          30-JAN-2001;
```

Shannon ME;

Sequence 17 BP; 6 A; 8 C; 2 G; 1 T; 0 U; 0 Other;

Gaps 0; 4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.4e+02; 7ative 0; Mismatches 2; Indels Local Similarity 87.5 les 14; Conservative Query Match Matches

797 CAAGAGCTCTCCTCCA 812

2 CAAGAGCCCTCCACCA 17

a

ABN00236 standard; DNA; 17 BP RESULT 319 ABN00236 

29-MAY-2002 (first entry)

Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:228.

. 0

Gaps

ö

797 CAAGAGCTCTCCTCCA 812

à

14; Conservative

Matches

1 caadadcccrccacca 16

ABN06104 standard; DNA; 17 BP

RESULT 320

ABN06104

ABN06104;

SX B

Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.

Homo sapiens

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 (an be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 mucleic acids in samples, as amplification substrates, to compare initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunospens to raise antibodies that specifically recognise hGDMLP-1 proteins, as specifically of hGDMLP proteins, as specific biomolecule and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desoribic obinication, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The concentration of skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polypeptide, for raising antibodies that recognize hGDWLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDWLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity 87.5%; Pred. No. 4.4e+02;
Similarity 87.5%; Pred. No. 4.4e+02;
14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hanzel DK, Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; SEQ ID NO 228; 214pp; English.
                                                                                                                                                                  27-SEP-2000; 2000US-0235359F.
04-OCT-2000; 2000GB-00024263.
30-JAN-2001; 2010W0-US000661.
30-JAN-2001; 2001W0-US000663.
30-JAN-2001; 2001W0-US000664.
30-JAN-2001; 2001W0-US000666.
30-JAN-2001; 2001W0-US000666.
30-JAN-2001; 2001W0-US000666.
                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000669.
2001WO-US000670.
                                                                                   25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                      05-FEB-2001; 2001US-0266860P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-179446/23.
WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
30-JAN-2001;
                                          06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
```

```
WO200192524-A2.
                                                         30-JAN-2001;
                     Homo sapiens
                                        26-MAY-2000;
                                          21-SEP-2000;
27-SEP-2000;
                                                 30-JAN-2001;
                                                   30-JAN-2001;
                                                           30-JAN-2001;
                                                             30-JAN-2001;
                                                                30-JAN-2001;
                                                                  30-JAN-2001;
                                                                    30-JAN-2001;
                                               04-OCT-2000;
                              06-DEC-2001
                                                                                  Gu Y,
```

```
775 CIGAGGCAGCCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gu Y, Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-DEC-2001.
                                                                                                                                                                                                                                                                                                                                                                                      ABN06105;
                                                                               N
                                                                                                                                                                                                                   RESULT 321
    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynuclectide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 cands can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP-1 proteins, as specific biomolecule capture probes for surface-enhanced laser describing in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart may resent a manual production and subsociated with the expression of hGDMLP-1, in particular heart may resent associated with the characteristics and skeletal manual endiagnosing a characteristic and skeletal manual endiagnosing and skeletal manual endiagnosing a production and in vaccines of hGDMLP-1 is localised to chromosome 22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence represents an oligomer used in the screening of the hGDWLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                  Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shannon ME;
                                                                                        Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6096.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 4.4%; Score 12.8; DB 1; Length 17; Best Local Similarity 87.5%; Pred. No. 4.4e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 2 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hanzel DK, Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 6096; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001; 2001WO-US000670.
05-FBB-2001; 2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US000662.
2001WO-US000663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001WO-US000665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001WO-US000667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US000668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAY-2001; 2001WO-US016981
    29-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AEOM-) AEOMICA INC.
```

.; 0

Gaps

. 0

```
The present invention describes a human genome-derived myosin-like

protein 1 (hGDMLP-1). The protein and polymocleotide sequences of hGDMLP-

1 can be used in gene therapy and vaccine production. The hGDMLP-1

nucleic acids can be used as probes to detect, characterise and quantify

hGDMLP-1 nucleic acids in samples, as amplification substrates, to

provide initial substrates for the recombinant engineering of hGDMLP-1

protein variants having desired phenotypic improvements, and for

expressing the proteins. The hGDMLP-1 proteins or polypeptides may be

used as immunogens to raise antibodies that specifically recognise hGDMLP-

cused as immunogens to raise antibodies that specifically recognise hGDMLP-

cused as immunogens to raise antibodies that specifically recognise hGDMLP-

cused as immunogens to raise antibodies that specifically recognise hGDMLP-

cused as immunogens to raise antibodies that specific blomolecule

and/or amount specifically of hGDMLP proteins, as specific blomolecule

complure probes for surface-enhanced laser describin in injection, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

condition and in vaccines or for replacement therapy. The

production and in vaccines or for hard for diagnosing a

disporder associated with the expression of hGDMLP-1, in particular heart

and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                 Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                        Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6097.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure, SEQ ID NO 6097; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hanzel DK,
                                                                                                            ABN06105 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JNN-2001, 2001WO-US000663.
30-JAN-2001, 2001WO-US000664.
30-JAN-2001, 2001WO-US000665.
30-JAN-2001, 2001WO-US0006667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000669.
2001WO-US000670.
2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-OCT-2000; 2000GB-00024263.
30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001; 2001WO-US000668
crercascasccccrc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                   (first entry)
```

```
..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
The present sequence represents an oligomer used in the screening of the hGDWLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                               Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Parched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                           Gaps
                                                                                                                                           .
0
                                                                                                            4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.4e+02; artive 0; Mismatches 2; Indels
                                                                                    Sequence 17 BP; 2 A; 8 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                     Human HTPL scanning oligonucleotide SEQ ID 1568.
                                                                                                                                                                                                                                                                      ABV80322 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JNN-2001; 2001WO-US000667.
30-JNN-2001; 2001WO-US000668.
30-JNN-2001; 2001WO-US000669.
23-MAY-2001; 2001US-00864761.
09-OCT-2001; 2001US-0327899P.
                                                                                                                                                                      775 CTGAGGCAGCCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US000664.
2001WO-US000665.
                                                                                                                                                                                               crereaecaececre 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-JAN-2002; 2002EP-00001167
                                                                                                                                                                                                                                                                                                                            03-JAN-2003 (first entry)
                                                                                                                                         14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-676582/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (AEOM-) AEOMICA INC.
                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EP1229046-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-AUG-2002,
                                                                                                                                                                                                                                                                                                  ABV80322;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhan J;
                                                                                                                                         Matches
                                                                                                                                                                                                                                                                    8.566666
```

The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98559 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was import or human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of Example 2; Page 269; 718pp; English

The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10p12.1. HTPL and its coding sequence are

```
..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of festis, or afteral, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are cilically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
                                                                                                                                                                                                                                                                                                                                                                                          Human, gene therapy, tumour suppressor, HTPL, chromosome 10p12.1; human testis expressed Patched like protein, testis; adrenal; liver; male germ cell development, bone marrow, brain, kidney, lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                             Gaps
                                                                                                                                                               0
                                                                                                                                     Length 17;
                                                                                                                                                             2; Indels
                                                                                                         Sequence 17 BP; 7 A; 6 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                   4.4%; Score 12.8; DB 1;
87.5%; Pred. No. 4.4e+02;
Live 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                   Human HTPL scanning oligonucleotide SEQ ID 1567.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 2; Page 269; 718pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000668.
2001WO-US000669.
2001US-00864761.
2001US-0327898P.
                                                                                                                                                                                                                                                                                     ABV80321 standard; DNA; 17 BP.
                                                                                                                                                                                       915 ATTATCATCACCAC 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000664.
2001WO-US000665.
2001WO-US000667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-JAN-2002; 2002EP-00001167.
                                                                                                                                                                                                                   1 ATTACAATCACCACCA 16
                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-676582/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001;
30-JAN-2001;
23-MAY-2001;
09-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EP1229046-A2
                                                                                                                                                                                                                                                                                                                                         03-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-AUG-2002
                                                                                                                                                                                                                                                                                                              ABV80321;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zhan J;
                                                                                                                                                                                                                                                                          ABV80321
                                                                                                                                                                                                                                                                                                   55555555X8
                                                                                                                                                                                         à
                                                                                                                                                                                                                g
```

```
useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
      8x33333333x8
```

Sequence 17 BP; 7 A; 6 C; 0 G; 4 T; 0 U; 0 Other;

```
Gaps
                             .
0
4.4%; Score 12.8; DB 1; Length 17; B7.5%; Pred. No. 4.4e+02;
                           Indels
                           0; Mismatches
                                                       915 ATTATCATCACCACCA 930
                                                                                 17
                                                                              ATTACAATCACCACCA
           Local Similarity 87.5
les 14; Conservative
 Query Match
                                                        à
```

ö

ABK18752 standard; RNA; 17 BP. RESULT 324

(first entry) 09-APR-2002 

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenannay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme; Human ERG DNAzyme target sequence Seq ID No 1399. amberzyme

Homo sapiens.

WO200188124-A2.

22-NOV-2001

16-MAY-2001; 2001WO-US015866.

16-MAY-2000; 2000US-00572021

(RIBO-) RIBOZYME PHARM INC.

GLAXO GROUP LID (GLAX Von Carlowitz I, Mcswiggen JA, Mclaughlin F, Randi AM; WPI; 2002-082995/11. Jarvis T,

Novel polynucleotide which down regulates expression of Ets-related gen useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 90; 149pp; English.

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, Imphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tubercus sclerosis, port-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, osler-Weber-rendu syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG,

```
the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour under conditions suitable for the treatment. Leukaemia or tumour ampiogenesis is treated by administering (1) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (1) is useful for reducing ERG activity in a cell, by contacting the cell with (1). (1) is useful for cleaving RNA of ERG gene, by contacting (1) with RNA, in the presence of a divalent cation such as Mg2+. (1) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnosit cool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (1) is useful for specifically targeting genes that share homology with ERG gene or ERG fusion genes. ABK17354-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and construction called the invention
under conditions suitable for
contacting cells of the patient with (I)
```

Sequence 17 BP; 3 A; 4 C; 5 G; 0 T; 5 U; 0 Other;

```
Gaps
                              ·
0
Length 17;
4.4%; Score 12.8; DB 1; Length 1 56.2%; Pred. No. 4.4e+02; ive 5; Mismatches 2; Indels
                              9; Conservative
                 Local Similarity
Query Match
                              Matches
```

ö

831 16 816 CAGGGTTGGCTGTGTC CAGGAUUGGCUGUCUC :: Н

à g

ABK19169 standard; RNA; 17 BP. (first entry) 09-APR-2002 RESULT 

Human ERG Amberzyme target sequence Seg ID No 1816.

Human; hammerhead ribozyme, cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; amberzyme.

Homo sapiens.

WO200188124-A2.

22-NOV-2001.

16-MAY-2001; 2001WO-US015866.

16-MAY-2000; 2000US-00572021

(RIBO-) RIBOZYME PHARM (GLAX ) GLAXO GROUP LTD

Von Carlowitz I, Mcswiggen JA, WPI; 2002-082995/11.

Jarvis I,

Randi AM;

Mclaughlin F,

Novel polynucleotide which down regulates expression of Ets-related genuseful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 121; 149pp; English.

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating

```
conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, to neovascular glaucoma, myopic degeneration, archiritis, psoriasis, verruca vulgaris, angiofibroma of tubercous sclerosis, port-wine stains, Sturge Weber syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treatment, leukaemia, osteoporosis and wound healing. (I) is useful for treatment The method comprises the use of one or more therapies to the treatment. The method comprises the use of one or more therapies under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for expectic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for expecting genes that share homology with RNG gene or ERG fusion genes. ABKI7354-ABK22719 represent nucleic acids, including antisense and carymantic nucleic acid molecules which regulate expression of ERG, and company and contacting details and mutations which regulate expression of ERG, and contacting dense that share homology with RNG gene or ERG fusion genes. ABKI7354-ABK22719 represent nucleic acids, including antisense and contacting genes that share homology with RNG gene or ERG fusion genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     related PCR primers of the invention
```

; 4.4%; Score 12.8; DB 1; Length 17; 56.2%; Pred. No. 4.4e+02; cive 5; Mismatches 2; Indels Sequence 17 BP; 2 A; 4 C; 6 G; 0 T; 5 U; 0 Other; 816 CAGGGTTGGCTGTGTC 831 2 CAGGAUUGGCUGUCUC 17 Conservative Query Match Best Local Similarity Matches 9; Conserv ð g

ó;

Gaps

Human POSHL1 scanning oligonucleotide SEQ ID NO 716. ABV90003 standard; DNA; 17 BP gene therapy; transgenic; ss. (first entry) 23-DEC-2002 ABV90003; RESULT 326 ABV90003 

Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine;

EP1239051-A2 11-SEP-2002 Homo

2001WO-US000664. 2001WO-US000665. 2001WO-US000666. 28-JAN-2002; 2002EP-00001165 30-JAN-2001; 30-JAN-2001; 30-JAN-2001;

2001WO-US000667. 2001WO-US000668. 2001WO-US000669. 2001WO-US000670. 2001US-00864761 2001US-0328205P 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 10-OCT-2001; 30-JAN-2001; 23-MAY-2001;

Shannon M;

(AEOM-) AEOMICA INC

WPI; 2002-684061/74.

Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.

Example 2; SEQ ID NO 716; 60pp + Sequence Listing; English.

The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (SL, ABB83999), a sequence having 65% sequence of factity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful of cor identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHLL including diagnosing and treating cancer, they useful in the development of vaccines and (II) is caseful for measuring and for surveying gene expression and creating care useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the privated specification, but is based on sequence information supplied to berwent by the European Patent Office 

Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

Gaps ; 0 Query Match
4.4%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels

; 0

à g RESULT 327 ABV90002

ABV90002 standard; DNA; 17 BP ABV90002;

(first entry) 23-DEC-2002 Human POSHL1 scanning oligonucleotide SEQ ID NO 715.

Human, POSHL 1, SH3 domain, POSH-like signalling protein 1; oncogene, Rho GTPase; signal transduction, gene expression, cancer, vaccine, gene therapy; transgenic; ss.

Homo sapiens.

EP1239051-A2.

11-SEP-2002.

2001WO-US000669. 2001WO-US000670. 28-JAN-2002; 2002EP-00001165 2001WO-US000664 2001WO-US000666 2001WO-US000667 2001WO-US000668. 2001US-00864761. 2001US-0328205P. 2001WO-US000663 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 23-MAY-2001; 

(AEOM-) AEOMICA INC.

10-OCT-2001;

```
WPI; 2003-093016/08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MCSM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MORR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 329
                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACD65498,
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                           The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (SI, ABB83999), a sequence having 65% sequence of 730 amino acids (SI) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful as downstream components of the signal transduction pathway. (I) is useful constituting a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating cansed by altered expression of human POSHL1 including diagnosing and treating canser, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomucleotide useful in examples of the invention. Note: The present sequence information supplied to printed specification, but is based on sequence information supplied to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                      Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; endothelial cell; EC; tumour endothelial cell; TEM; NEM; Tumour endothelial marker; normal endothelial marker; PEM; pan-endothelial marker; polycystic kidney disease; psoriasis; diabetic retinopathy; rheumatoid arthritis; tumour angiogenesis; necangiogenesis; immume response; cytostatic; antidiabetic; ophthalmological; antirheumatic; antiathritic; antipsoriatic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 4.4%; Score 12.8; DB 1; Length 17; Best Local Similarity 87.5%; Pred. No. 4.4e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                   Example 2; SEQ ID NO 715; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vogelstein B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human tumour endothelial marker TEM 13 DNA long tag #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kinzler KW,
                                                                                                                                                                                                                                                                                                                                                                                                                        Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      St Croix B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           838 CTTCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABX72082 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-APR-2002; 2002WO-US008253.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-APR-2001; 2001US-0282850P.
06-FEB-2002; 2002US-0354262P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       criciccegadaded 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        UYJO ) UNIV JOHNS HOPKINS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-MAR-2003 (first entry)
                                                                         -1, useful for treating d:
activity of human POSHL1.
                             WPI; 2002-684061/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Carson-Walter E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200283874-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-OCT-2002
Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABX72082;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 328
8
```

```
ô
New purified human transmembrane protein, designated as tumor endothelial
                                                                                                                                                                                                                               The present invention relates to a novel method for the isolation of endothelial cells (ECs), and the identification of genes expressed in normal and tumour Ecs. Tumour endothelial marker (TEM), normal endothelial marker (TEM), normal polynucleotiels sequences encoding them are useful for detecting, diagnosing or treating tumours as encoding them are useful for detecting, diagnosing or treating tumours endothelial as polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis, and psoriasis. They are also useful for inhibiting neoangiogenesis or tumour angiogenesis, for inducing an immune response to tumour endothelial cells in a patient, or for identifying candidate drugs for treating tumours. ABX72067-ABX72116 represent human TEM DNA tags
                                    marker (TEM) 3, useful for detecting, diagnosing or treating tumors, polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; antisense; inozyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptemer; HBV reverse transcriptase; Enhancer I region; viral replication; degemerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . Match 4.4%; Score 12.8; DB 1; Length 17; Local Similarity 87.5%; Pred. No. 4.46+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HCV minus strand DNAzyme substrate sequence #2073.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 6 A; 3 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                            Disclosure; Page 360; 374pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACD65498 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-MAR-2001; 2001US-00817879.
08-UUN-2001; 2001US-0087478.
08-UUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 AGTGAGACCCAGGAGA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-2002; 2002WO-US009187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-DEC-2001; 2001US-0337055P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      706 AGCGAGTCCCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PAVCO P.
LEE P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200281494-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACD65498;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-)
(BLAT/)
(MACE/)
```

```
RESULT 331
                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADB42565
g
                                                                                                                                                                                                                                                                                                                                                                                 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                         The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptemers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Bnhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds
                                                                                                                                                                                                                                                                                                                                                                              that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNAzyme or minus strand DNAzyme sequences disclosed in the present
                                                                                                                   for treating cirrhosis, liver failure, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Murine oligonucleotide associated with tumour supression, SEQ ID 2853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                            ь;
                                             Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.4%; Score 12.8; DB 1; Length 17; Best Local Similarity 87.5%; Pred. No. 4.4e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                             Pavco P,
                                             Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 17 BP; 4 A; 5 C; 5 G; 0 T; 3 U; 0 Other;
                                             Mcswiggen J,
                                                                                                                                                                                 Claim 1; Page 312; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACC65606 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ч
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             765 GCCTCCACTTCTGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCTCCGCTTATGAGG
                                                                                                                                     hepatocellular carcinoma,
                                                                                                                      Novel compound useful
                                                          Roberts E;
                                            Macejak D,
                                                                                        WPI; 2003-229207/22.
DRAPER K.
ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-MAR-2003
                                             Blatt L, !
Draper K,
                                                                                                                                                      infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACC65606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16
              (ROBE/)
 (DRAP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC65606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
```

Telerman A, Amson R, Tuijnder M;

(MOLE-) MOLECULAR ENGINES LAB.

```
;
0
                                                                                                                                                                                                        ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistence. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the the nucleotides, or the complement, or corresponding RNA, of the
                                           New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                    present invention relates to murine oligonucleotides (ACC62754-
                                                                                                                                                                                                                                                                                                                                                                                             specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                            degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.4e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumour suppression/reversion associated nucleotide #2888.
                                                                                                                                                                                                                                                                                                                                                                         are characterised by development of tumours or cell
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 3 A; 12 C; 1 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 369; 771pp; French.
                                                                                                                                         Disclosure; Page 364; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB42565 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    921 ATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               L7-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 Archedecededeced 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       relerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (revised)
                                                                                              and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-441574/41.
WPI; 2003-333167/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003040369-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADB42565;
```

```
nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, approprist and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis
                                                                                                                                                                                                                                                                                                                                                      and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 6 A; 6 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         expression of the nucleotides
```

Query Match
4.4%; Score 12.8; DB 1; Length 17;
Best Local Similarity 87.5%; Pred. No. 4.4e+02;
Matches 14; Conservative 0; Mismatches 2; Indels 817 802 GCTCTCCTCCAACTCA à

RESULT 332

ADE87480 standard; DNA; 17 BP. ADE87480;

29-JAN-2004 (first entry)

fowlpox virus; PPV; virucide; tuberculostatic; protozoacide; antipyretic; cytostatic; heptotropic; cantibacterial; vaccine; malaria; tuberculosis; East Coast fever; avipox virus; influenza; heptitis; human papilloma virus; tumour; leishmaniasis; listeriosis; theileria; Fowlpox virus Orfl gene deleted sequence. ds; Orf1 dene; 

Fowlpox virus.

WO2003047617-A2.

12-JUN-2003

02-DEC-2002; 2002WO-GB005411.

30-NOV-2001; 2001GB-00028733 30-NOV-2001; 2001US-0334649P

(ISIS-) ISIS INNOVATION LTD.

Anderson R; Gilbert S, Hill A, Skinner M, Laidlaw S,

WPI; 2003-513700/48.

Treating and/or preventing e.g. malaria or tuberculosis, or eliciting an immune response, comprises administering a priming composition and a boosting composition containing a non-replicating viral vector in either order.

Claim 8; Page 87; 302pp; English.

The invention relates to a fowlpox virus (FPV) genome which has modifications in one or more wild-type FPV genes. The invention further relates to a novel method for treating and/or preventing a disease in a subject comprising administering two compositions, each containing a non-replicating viral vector. At least one of the compositions comprises a poxvirus vector derived from a fowlpox virus. The novel compositions have

```
antipyretic, cytostatic, hepatorropic, and antibacterial. The non-particularly mammans such as a primate, specifically human. The priming or boosting composition, or the kit is useful for manufacturing a medicament for treating and/or preventing a disease which is, or results from, a chronic infection such as malaria, tuberculosis or East Coast fever, or for eliciting a T-cell immune response in a subject. Non-cultured CEF cells are useful for growing an avipox virus, such as fowlpox virus. The method or the vaccine may further be used to treat or prevent influenza, hepatitis, human papilloma virus and other viral infections, malignancies such as tumours, leishmaniasis, listeriosis, and theileria. This polynucleotide sequence represents the deleted region of the Orfi gene of the fowlpox virus genome of the invention.
      following activities: virucide, tuberculostatic, protozoacide,
```

Sequence 17 BP; 4 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

Gaps ·. 4.4%; Score 12.8; DB 1; Length 17; 87.5%; Pred. No. 4.48+02; ive 0; Mismatches 2; Indels 14; Conservative Local Similarity Query Match Matches

0;

790 CTGGTGCCAAGAGCTC 805 17 CTGGTGCGAAGATCTC N

셤

ð

ô

Gaps . 0

AAX89408 standard; DNA; 18 BP. AAX89408 RESULT

AAX89408;

(first entry) 25-OCT-1999

Polyhistidine coding sequence used in the IL-17D/polyHIS fusion protein.

Polyhistidine fusion protein; Interleukin-17D; IL-17D; isoelectric point; cytokine; B cell tumour; ss.

Synthetic.

WO9935267-A1.

15-JUL-1999.

99WO-US000513. 08-JAN-1999; 98US-0070886P. 09-JAN-1998;

(IMMV ) IMMUNEX CORP.

Spriggs M, Upton C;

WPI; 1999-478835/40.

Murine and Human interleukin 17D DNA, polypeptides and its fragments, as molecular weight markers. useful 

Example 1; Page 56; 72pp; English.

This encodes a polyhistidine sequence used in the construction of human and mouse interleukin-17D immunoglobulin poly histidine-tagged fusion proteins. The homology between IL-17 and IL-17D suggests that the IL-17D polypeptide is capable of signalling through cytokine receptors. The IL-17D protein and fragments of it are useful as controls for peptide fragmentation which can be used to determine the isoelectric point of a sample protein. Antibodies generated against IL-17D and its fragmented peptides can be used to enhance the accuracy of these molecular weight markers. IL-17D can also be used as a therapeutic agent for the treatment of diseases mediated by IL-17D. IL-17D polypeptides bind to B cells. It is likely that these polypeptides can be used for targeting compounds to B cells and B cell tumours, and for specific selection of B cell populations

```
(GEST ) GENSET
                                                                                                                                                                                                                                                                                    detecting them
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-NOV-1998;
                                                                                             18-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-SEP-2001
                                                                                                              20-FEB-1998;
                                                            WO9942609-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-OCT-1999
                                                                             26-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ73801;
                                  Synthetic
                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                           Beck JJ;
                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 336
                                                                                                                                                                                                                                                                                                                                Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                             AAZ73801,
                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                          \delta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                            ó
                                                                                                                                                                                                                                                                                                                                                                                                                             This sequence represents a PCR primer used to isolate DNA encoding the human Nck associated protein 1 (Napl) of the invention. Napl inhibits apoptosis. The protein can be used in the investigation, diagnosis and treatment (e.g. by gene therapy) of Alzheimer's disease
                                                                                                                                                                                                                                                                                                                                                                                   Protein inhibiting apoptosis, useful in the diagnosis and treatment of Alzheimer's disease.
                                                                                                                                                                                             associated protein 1; Napl; human; apoptosis; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                            0
                                                                                                                                                                              PCR primer for human Nck associated protein 1 coding sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.4%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.7e+02; rive 0; Mismatches 2; Indels
                          4.4%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.7e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18 BP; 4 A; 7 C; 3 G; 4 T; 0 U; 0 Other;
          Sequence 18 BP; 6 A; 9 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 79; 90pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  790 CIGGIGCCAAGAGCIC 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide primer JB660.
                                                                                                                           AAX84266 standard; DNA; 18 BP
                                                               920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                        98WO-JP005646.
                                                                                                                                                                                                                                                                                                                      (KYOW ) KYOWA HAKKO KOGYO KK.
(SAKA/) SAKAKI Y.
                                                                                                                                                                                                                                                                                                         97JP-00363183
                                                                               1 CATCACCATCACCATC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ11782 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            || || || || || || || || CTCCTGCCAAGAGGCTC
                                                                                                                                                              08-SEP-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14; Conservative
                                     Local Similarity 87.5
nes 14; Conservative
                                                                                                                                                                                                         therapy; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                     WPI; 1999-395181/33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-NOV-1999
                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                     WO9931239-A1
                                                                                                                                                                                                                                                                                       14-DEC-1998;
                                                                                                                                                                                                                                                                                                         L5-DEC-1997;
                                                                                                                                                                                                                                                                     24-JUN-1999.
                                             14;
                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ11782;
                                                                                                                                                                                                                                                                                                                                                    Sakaki Y;
                                                                                                                                              AAX84266;
                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                          RESULT 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 33
AAZ11782
ID AAZ1
XX
AC AAZ1
XX
OT 23-N
XX
XX
DT 23-N
DE Olig
                                               Matches
                                                                                                                                                                                                 Nck
                                                                                                                            g
    X S
                                                                               g
                                                                8
```

```
·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This primer can be used in the amplification-based detection of a fungal Internal Transcribed Spacer (ITS) DNA sequence. This sequence was derived from the ITS sequences, specifically from the regions of the ITS which exhibit the greatest difference among the fungal pathotypes. This allows the identification of specific pathogens and provides a method for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human biallelic marker downstream amplification primer SEQ ID NO:8157.
internal transcribed spacer; ITS; ribosomal RNA; fungal pathogen; PCR;
primer; detection; plant disease; crop protection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New internal transcribed spacer DNA from fungal pathogens, used as sources of primers and probes for pathogen detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.4%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP; 4 A; 3 C; 9 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (NOVS ) NOVARTIS AG.
(NOVS ) NOVARTIS-ERFINDUNGEN VERW GES MBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 13; Page 18; 40pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0082614P.
98US-0109732P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-IB000822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2 GCGAGTCTCGGGAGAG 17
                                                                                                                                                                                                                                                                                                                           99WO-EP001058
                                                                                                                                                                                                                                                                                                                                                                                          98US-00026601
                                                                                                                                      Pyrenophora tritici-repentis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ73801 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       707 GCGAGTCCCAGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 87.5
nes 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-527487/44.
```

Mon Jul 12 11:21:14 2004

Chumakov I;

Blumenfeld M,

```
WPI; 2000-013267/01
 Cohen D,
```

```
AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ65579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents acting on a disease as well as the characterisation of the differential efficacious responses to and side effects from the SEQ ID Nos 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and a sequence in the Sequence Listing from the
Novel biallelic markers used to construct a high density disequilibrium map of the human genome.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.4%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.7e+02; rive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP; 3 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                              Claim 8; Page 1970; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best_Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
```

Claim 3; Col 39; 30pp; English.

```
CATCACCATCACCATC 3
          18
ð
         g
```

ó

```
Human G-alpha-i3 antisense oligonucleotide ISIS#25949.
                  AAA15529 standard; DNA; 18 BP.
                                                       (first entry)
                                                      28-JUL-2000
                                      AAA15529;
RESULT 337
          AAA15529
                                     ACCONTACTOR ACCO
```

Human, G-alpha-i3, G protein, Gi protein, adenylyl cyclase, dopamine, thyrotropin-releasing hormone, somatostatin, signal transduction pathway; antisense oligonucleotide, ss. Location/Qualifiers Key modified_base Homo sapiens

```
/note= "Optionally 2'-methoxyethyl nucleotides providing bases 15. .18 are also 2'-methoxyethyl nucleotides. All cytidine residues within this region are then 5-
                                     /mod_base= OTHER
/note= "Optionally phosphorothioate deoxynucleotides"
1. .18
/*tag= a
/mod_base= OTHER
                                                                                                                   mod_base= OTHER
                                                                                                                                                                                                methylcytidine"
15. .18
                                                                                                Ω
                                                                                 ...4
'*tag=
                                                                           modified base
                                                                                                                                                                                                                 modified_base
```

/note= "Optionally 2'-methoxyethyl nucleotides providing bases 1. 4 are also 2'-methoxyethyl nucleotides. All cytidine residues within this region are then 5base= OTHER methylcytidine' *tag=

```
New antisense compounds targeting nucleic acids encoding human G-alpha-I3 useful for treating diseases associated with G-alpha-I3 expression and as probhylaxis to prevent or delay infection, inflammation or tumor formation.
                                                                                                                                                      99US-00339775.
                                                                                                         99US-00339775.
                                                                                                                                                                                                            PHARM INC
                                                                                                                                                                                                                                                                                                                WPI; 2000-375497/32.
                                                                                                                                                                                                          SISI (-SISI)
                                                                                                   24-JUN-1999;
                                                                                                                                                      24-JUN-1999;
US6063626-A
                                                   16-MAY-2000.
                                                                                                                                                                                                                                                             Cowsert LM;
```

The present sequence is an antisense oligonucleotide for the human Galpha-i3 gene. The protein produced from this gene is a member of the Gprotein family, and more specifically of the Gi family. The Gi proteins are involved in hormonal inhibition of adenylyl cyclase and the regulation of plasma membrane enzymes. In addition, Galpha-i3 has been shown to have a role in the dopamine, thyrotropin-releasing hormone and somatostatin signal transduction pathways. The oligonucleotide may be used to modulate expression of the Galpha-i3 gene and can be used to Sequence 18 BP; 1 A; 3 C; 3 G; 11 T; 0 U; 0 Other; prevent infection, inflammation and tumours 

```
Gaps
                                       ·.
   4.4%; Score 12.8; DB 1; Length 18; 37.5%; Pred. No. 4.7e+02; ve 0; Mismatches 2; Indels
                    ilarity 87.5%;
Conservative
                  Similarity
Query Match
Best Local Simil
Matches 14; C
```

0

Human PDK-1 antisense oligonucleotide ISIS #29226. 844 BP. Grarcriticitcier 17 AAC60612 standard; DNA; 18 (first entry) 829 GICTCTTTTCTTCTCT 01-FEB-2001 AAC60612; (1 ਨੇ g

Human, PDK-1; 3-phosphoinositide dependent protein kinase-1; antisense oligonucleotide; phosphorothioate; antiinflammatory; cytostatic; antimicrobial; ss. 99US-00289466. Homo sapiens 09-APR-1999; 26-SEP-2000. US6124272-A Synthetic. 

99US-00289466 (ISIS-) ISIS PHARM INC Cowsert LM; 09-APR-1999; Monia BP,

WPI; 2000-611015/58.

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a method of detecting nascent proteins involving aminoacylating a tRNA molecule with a 4,4-difluoro-4-bora-3A,4A-diaza-s-indacene (BODIPY) marker leading to the production of a misaminoacylated tRNA. This enables the detection, isolation and analysis of nascent proteins using UV without the usual accompanying radioactivity problems. It may be used to detect mutations, for example in cancer, Duchenne muscular dystrophy, adenomatous polyposis coli and colon cancer
Novel antisense compounds useful for inhibiting the expression of human 3-phosphoinositide dependent protein kinase-1, useful e.g. for treating inflammation, tumors and infections.
                                                                                                                                                                                    oligonucleotides containing a central gap region, consisting of ten 2'-deoxynucleotides, which is flanked on both sides by 2'-methoxyethyl (2'-wOE) wings. The oligonucleotides have a phosphorothioate backbone. The antisense oligonucleotides are useful for inhibiting the expression of human PDK-1 in human cells or tissues. They are also useful for preventing or delaying infection, inflammation or tumours and are useful
                                                                                                              The present sequence is one of a large number of antisense oligonucleotides which are targeted to a nucleic acid molecule encoding human 3-phosphoinositide dependent protein kinase-1 (PDK-1). The antisense compounds may be oligodeoxynucleotides or chimeric
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Method for detecting nascent proteins by fluorescence comprises misaminoacylating a tRNA molecule with a marker compound, useful for detecting mutations in proteins, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   protein detection; protein analysis; aminoacylated tRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                        4.4%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.7e+02; vative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nascent protein detection method related PCR primer #1.
                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 3 A; 3 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BODIPY marker; disease diagnosis; PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 22; Page 153; 204pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Olejnik J;
                                                                           Claim 3; Col 39; 41pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                      930 ACCCTCCAGAGAATTT 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00382736.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-AUG-2000; 2000WO-US023233.
                                                                                                                                                                                                                                                                                                    for research and diagnostics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 AACCTCCAGAGAATAT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF28074 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gite S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AMBE-) AMBERGEN INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-168972/17.
                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200114578-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rothschild KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                               14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF28074;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nascent
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 339
                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

```
.
0
                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a method of treating osteoarthritis via the administration of a composition comprising the camptodactyly-arthropathy-caxa vara-pericarditis (GACP) protein, or portions of the CACP protein. The composition may further comprise a local anaesthetic. The composition of the invention may be administered via intra-articular or intravenous injection. The human CACP protein is identified in the invention as being megakaryocyte stimulating factor (MSF). The gene encoding CACP protein (MSF) is located on chromosome 1q25-31, and mutations in this gene are responsible for the heritable disorder camptodactyly-arthropathy-coxa vara-pericarditis, in which patients have synovial hyperplasia without evidence of inflammation. CACP protein (MSF) acts as a synovium lubricant, and can be used to lubricate tissue and joints in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 treatment of osteoarthritis. The composition may be applied to reduce the symptoms of osteoarthritis (e.g., joint pain, loss of range of movement or joint damage). Sequences AAFS9672-AAFS9693 represent PCR primers used to amplify exonic gene fragments from GACP genomic DNA or to amplify cDNA fragments for the detection of mutations
                                                                                                                                                                                                                                                                                                                                                                                                    Human; CACP protein; camptodactyly-arthropathy-coxa vara-pericarditis; MSF; megakaryocyte stimulating factor; synovial lubricant; chromosome 1q25-31; osteoarthritis; joint lubrication; osteopathic; antiarthritic; PCR primer; ss.
                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New composition comprising the camptodactyly-arthropathy-coxa varapericarditis protein in combination with an anesthetic, useful for treating osteoarthritis, or as lubricants of tissue and joints.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 4.4%; Score 12.8; DB 1; Length 18; Best Local Similarity 87.5%; Pred. No. 4.7e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                       Length 18;
                                     4.4%; Score 12.8; DB 1; Length 1
87.5%; Pred. No. 4.7e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                Human CACP (MSF) gene exon 4-6 forward PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 BP; 5 A; 9 C; 0 G; 4 T; 0 U; 0 Other;
Sequence 18 BP; 6 A; 9 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 29; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYCA-) UNIV CASE WESTERN RESERVE.
                                                                                                                                                                                                                                                            ΒP
                                                                                                                     920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-JUL-2000; 2000WO-US020002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-JUL-1999; 99US-0145328P.
19-JUL-2000; 2000US-00145328.
                                                                                                                                                             CATCACCATCACCATC 16
                                                                                                                                                                                                                                                            AAF59682 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                       Local Similarity ...-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-182721/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200107068-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                      27-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-FEB-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Warman ML;
                                                                                                                                                                                                                                                                                                   AAF59682;
                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Loca
Matches
                                                                                                                                                                                                                       RESULT 340
                                                                              Matches
                                                                                                                                                                                                                                           AAF59682
  Š
                                                                                                                                                                                                                                                              à
```

Human; ss; aminopeptidase P; XPNEP2; bradykinin receptor B1; primer; BDKBB; tachykinin receptor B1; TACR1; Cl esterase inhibitor; ClNH; kallikrein 1; KLKI; bradykinin receptor B2; BDKRB2; gene therapy; angiotensin converting enzyme 2; ACE2; protease inhibitor 4; P14; polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma; cardiovascular disease; angina pectoris; hypertension; heart failure; myocardial infarction, ventricular hypertrophy; vascular disease; aneurysm; embolism; thrombosis; coronary artery disease; angioedaema; arteriosclerosis; atherosclerosis; hypersensitivity; sepsis; PCR; autolimmune disease; inflammatory arthritis; cancer; wound; genotyping; viral infection; bacterial infection; fungal infection; COPD; chronic obstructive pulmonary disease; enterocolitis.

Human genotyping PCR primer #4.

```
The present invention relates to a fused gene containing DNAs encoding a secretory signal peptide, a protein capable of capturing a metal and a protein localised on the cell surface. The gene can be used to express the metal capturing protein, which can then be used in purifying and recovering metal, for example in waste treatment. The present sequence is an oligonucleotide described in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fused gene with DNA expressing polypeptide capable of capturing metal, for recombinant vectors and transformants applicable in purifying environment and recovering metal efficiently, including waste treatment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.4%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.7e+02; live 0; Mismatches 2; Indels
                                                                                                                                                                                                                   Metal capturing protein; metal capture; secretory signal;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 BP; 6 A; 9 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                      /*tag= a
/product= "protein AAG62605"
                                                                                                                                                                                       Metal capturing protein related DNA #2.
                                                                                                                                                                                                                                                                                            location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 5; Page 32; 45pp; Japanese.
                                                                                                     BP.
920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99JP-00330226.
                                                                                                                                                                                                                                                                                                                                                                                                                                         26-OCT-2000; 2000WO-JP007518.
                           CATCACCACCATCTTC 18
                                                                                                 AAH45709 standard; DNA; 18
                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (TOYT ) TOYOTA JIDOSHA KK.
                                                                                                                                                                                                                                                                                                                                                     partial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-355927/37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tanaka A, Ueda M;
                                                                                                                                                                                                                                    waste treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P-PSDB; AAG62605
                                                                                                                                                                                                                                                                                                                                                                                WO200138517-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-NOV-1999;
                                                                                                                                                            06-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                              31-MAY-2001
                                                                                                                                                                                                                                                               Synthetic
                           ٣
                                                                                                                                AAH45709;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                      RESULT 341
```

Perrone MH;

Ma-Edmonds M,

Zerba KE,

Tsuchihashi Z, Hui L, Swanson BN, Powell JR; WPI; 2002-619265/66.

(BRIM ) BRISTOL-MYERS SQUIBB CO. (TSUC/) TSUCHIHASHI Z. (HUIL/) HUI L.

04-DEC-2000; 2000US-0251015P. 23-JAN-2001; 2001US-0263678P. 02-MAR-2001; 2001US-0273037P.

03-DEC-2001; 2001WO-US047235

WO200261131-A2 Homo sapiens,

08-AUG-2002.

The invention relates to an isolated mucially and a numbal gene encoding aminopeptidase to an isolated mucially and a fundaminopeptidase to an isolated mucially and processor in the invention receptor B1 (TACR1), C1 esterase inhibitor (CINH), kallikrein 1 (ACE2) or protease inhibitor 4 (F14), comprising at least one can comprising at least one of polymorphic position. Also included are (1) a probe that hybridises to a polymorphic position. Also included are (1) a probe that hybridises to a polymorphic position as provided in the detailed summary of single mucleotide polymorphisms comprising additional 5, and 3' flanking genomic sequence; (2) analysing (M1) at least one nucleic acid sample comprising controlled and etermining the nucleic acid sequence at one or more polymorphic positions in a gene of comprising grouping at least two nucleic acid sequence at one or more polymorphic positions in a gene comprising grouping at least two nucleic acids encoding a protein selected from the group above; (3) constructing (M2) haplotypes using the genes comprising grouping at least two nucleic acids (4) identifying (M3) an individual at risk of developing a disorder upon administration of an ACE inhibitor and/or vasopeptidase inhibitor using the polymorphic data; (5) a library of nucleic acids, eacth of which comprising obtaining a nucleic acids sample, determining the comprising obtaining a nucleic acids sample, determining the comprising obtaining a nucleic acid sample, treating, and compositions are useful for detecting, disaposing, treating, and compositions are useful for detecting, disaposing, treating, involve angiogenesis like haemangiomas, tumours, sarcomas, crohn's disease, trachomas, and cardiovascular diseases like angine protoris, chypertension, heart failure, myocacdial infarction, ventricular chypertension, heart failure, myocacdial infarction, ventricular chypertension, artery disease, arteriosclerosis andoing a useful New isolated nucleic acid with at least one polymorphic position, usfor detecting, diagnosing and treating disorders such as angioedema, cancer, viral, bacterial or fungal infection, cardiovascular and The invention relates to an isolated nucleic acid from a human gene Example 3; Page 889; 977pp; English. autoimmune diseases. 

0;

Gaps ·,

920 CATCACCACCACCTC 935

14; Conservative

Local Similarity

Best Loca Matches

CATCACCATCACCATC 16

٦

d à

ВР

ABS60851 standard; DNA; 18

RESULT 342 ABS60851/c (first entry)

05-NOV-2002

ABS60851;

AXXXXXXXXXXXX

a PCR primer used in the invention to amplify target regions of the

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a novel polymorphic variant of a sequence of CYP7A1 protein or its fragment. The polymorphic has hepatotropic and antilipaemic activity. The polymorphic variants are useful in studying the expression and function of CYP7A1, in expressing CYP7A1 protein for use in screening candidate drugs to treat diseases related to CYP7A1 use in studying the effect of the variation on the biological activity of CYP7A1, and the binding affinity of candidate drugs targeting CYP7A1 for the treatment of disorders such as cholesterol and bile disorders. Haplotyping methods are useful in validating CYP7A1 as a
                  diseases and disorders are listed in the specification). The polynucleotides are also useful for chromosome identification. Antibodies against the proteins may be utilised for immunophenotyping of cell lines and biological samples. The present sequence is a genotyping PCR primer for the gene encoding one of the proteins listed above
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     candidate target for treating a specific condition or disease predicted to be associated with CYPA1 activity, or in the design of clinical trials of candidate drugs for treating a specific condition or disease associated with CYPA1 activity, such as cirrhosis, familial hypertriglyceridaemia and hypercholesterolaemia. Transgenic animals are also useful for studying expression of the CYPA1 isogenes in vivo, for in vivo screening and testing of drugs targeted against CYPA1 protein, and for testing the efficacy of therapeutic agents and compounds related to cholesterol and bile acid metabolism. The present sequence represents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, CYP7A1; hepatotropic; antilipaemic; cholesterol disorder;
cirrhosis; bile disorder; hypertriglyceridaemia; hypercholesterolaemia;
cytochrome P450, subfamily VIIA, polypeptide 1; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New cytochrome P450 subfamily VIIA (cholesterol 7 alphamonooxygenase) polypeptide 1 gene variants, useful for studying the expression and activity of CYP7A1 and screening drugs for treating disorders of cholesterol and bile metabolism.
                                                                                                                                                                                                                                            Gaps
obstructive pulmonary disease (COPD) and enterocolitis (many other
                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                            4.4%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                   Sequence 18 BP; 3 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chew A, Denton RR, Nandabalan K, Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human CYP7Al fragment 1 forward PCR primer #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 1; Page 33; 84pp; English.
                                                                                                                                                                                                                                                                                   778 AGGGCAGCCCCTCTGG 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-JAN-2001; 2001WO-US003164.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-JAN-2001; 2001WO-US003164.
                                                                                                                                                                                                                                                                                                                            17 AGGCCAGTCCCTCTGG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                     ABV99237 standard; DNA; 18
                                                                                                                                                                      Query Match
Best Local Similarity 87.5%
These 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-713314/77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200260915-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV99237;
                                                                                                                                                                                                                                                                                                                                                                                              RESULT 343
                                                                                                                                                                                                                                                                                                                                                                                                                     ABV99237/
8888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                            셤
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    diseases containing as an active component an inhibitor of the expression or activity of hypothalamus-expressed G-protein coupled receptor 901 and for treatment of cibophobia containing as an active component a potentiator of the expression or activity of G-protein coupled receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Inhibitors of expression or activity of G-protein coupled receptor 901 for treatment of lifestyle-related diseases and cibophobia.
                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to novel remedies for the treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901. The diseases which can be treated include obesity, diabetes and
hyperlipaemia, and cibophobia (anorexia nervosa). The present
oligonucleotide was used in an example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                   Human; anorectic; antidiabetic; antilipemic; hypothalamus;
G-protein coupled receptor 901; obesity; diabetes; hyperlipaemia;
cibophobia; anorexia nervosa; ss.
                                                                                                            ·`
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                          4.4%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.7e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.4%; Score 12.8; DB 1; Length 18; 87.5%; Pred. No. 4.7e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 18 BP; 5 A; 0 C; 7 G; 6 T; 0 U; 0 Other;
                                              Sequence 18 BP; 4 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Taiji M;
                                                                                                                                                                                                                                                                                                                                        6xHis-tag linker oligonucleotide #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Yamanaka M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 4; Page 68; 91pp; Japanese.
                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABX12971 standard; DNA; 18 BP.
                                                                                                                                       793 GIGCCAAGAGCICICC 808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (SUMU ) SUMITOMO PHARM CO LID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        915 ATTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-OCT-2002; 2002WO-JP010250.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-OCT-2001; 2001JP-00306872.
                                                                                                                                                                     ~
                                                                                                                                                                                                                                                ACC70855 standard; DNA; 18
                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                     17 GIGCCAAGAACTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCATCATCACCA
                                                                                         Local Similarity 87.5
les 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tsuchida A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-354886/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003030936-A1
                                                                                                                                                                                                                                                                                                           20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-APR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14;
               CYP7Al gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sugaru E,
                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                             ACC70855;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11
                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 345
                                                                                                                                                                                                                  RESULT 344
                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                ACC70855/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABX12971
SSXS
                                                                                                                                       ð
                                                                                                                                                               qq
                                                                                                                                                                                                                                                              ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
```

```
and lifestyle related disorders, comprising a substance that prevents expression or function of a polypeptide having a 300 or 345 residue amino acid sequence, given in the specification. The invention further relates to a nucleic acid comprising a 1038 or 1324 nucleotide sequence, given in the specification. The novel remedies have anabolic activity and can be used to treat disorders by gene therapy or cell therapy. The remedies can be used in the treatment of anorexia and lifestyle related disorders such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            invention relates to novel remedies for the treatment for anorexia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                as eating disorders, obesity, diabetes and hypertension. This sequenc represents a PCR primer used in the exemplification of the invention.
                                                                                                                primer, lifestyle related disorder; anabolic activity; gene therapy; cell therapy; eating disorder; obesity; diabetes; hypertension; ss;
                                                     Anorexia / life-style related diseases related primer, SEQ ID No 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treatment for anorexia, eating disorders, obesity, diabetes and hypertension by preventing expression or function of a polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 7; Page 87; 91pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SUMU ) SUMITOMO PHARM CO LID.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-DEC-2001; 2001JP-00397523.
                                                                                                                                                                                                                                                                                                                                                                                                                      27-DEC-2002; 2002WO-JP013757.
04-DEC-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Yamanaka M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Staphylococcus aureus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-618060/58
                                                                                                                                                                                                                                                                                                  WO2003055507-A1.
                                                                                                                                            cell therapy;
anorexia; PCR.
                                                                                                                                                                                                                                       Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-JAN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DE4338119-A1
                                                                                                                                                                                                                                                                                                                                                              10-JUL-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sugaru E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ86985;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ86985
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention relates to a novel assay for determining the ability of a test compound to modulate the formation of a trimolecular complex (TC) including interleukin (IL), a soluble IL-receptor (IL-R) polypeptide and a soluble IL-R accessory protein (IL-RACP). The method comprises bringing into contact an IL polypeptide, a soluble IL-R polypeptide, a soluble IL-R polypeptide and a test compound, and determining the amount of TC formed. The method of the invention is useful for determining the ability of a test compound to modulate the formation of a trimolecular complex including IL, a soluble IL-R and a soluble IL-RACP. The method is useful for high throughput screening and enables direct measurement of protein binding characteristics. It is also useful for identifying small molecule inhibitors of TC and hence of IL-1 biological activity. The method may be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determining ability of test compound to modulate formation of interleukin soluble trimolecular complex, by bringing into contact the components of the complex and test compound and determining amount of complex formed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         used in screening methods and assays for agents which modulate the interaction between IL and IL-R, and/or the interaction between IL-RACP and the interaction between IL-RACP and the IL-R/IL biomolecular complexes. This method identifies small molecule inhibitors of TC and hence IL-1 biological activity, and provides a significant advantage over prior methods since it is possible to dose orally and to reduce the cost of production of such compounds compared to the production cost of recombinant proteins. The main advantage of using soluble forms of the proteins in the method is the ease with which these reagents enable the formatting and running of High
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Throughput Screening (HTS) assays. The present sequence represents a DNA sequence encoding an interleukin 1 family protein used in the method of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                            Interleukin 1; human; interleukin1; IL-1; IL-1-receptor; IL-1R; ds; IL-R accessory protein; IL-RACP; protein-protein interaction; gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 4.4%; Score 12.8; DB 1; Length 18; Best Local Similarity 87.5%; Pred. No. 4.7e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 BP; 6 A; 9 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 55; 171pp; English
                                                                                                                   encoding 6 HIS tag.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-MAY-2001; 2001GB-00012251.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-MAY-2001; 2001GB-00012251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCACCATCACCATC 16
                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bertelli F, Brown JP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (WARN ) WARNER LAMBERT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-150708/15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the invention
                                                                                                                   DNA sequence
                                                        10-MAY-2003
                                                                                                                                                                                                                                                                                                                               GB2375604-A
                                                                                                                                                                                                                                                                                                                                                                                          20-NOV-2002
                                                                                                                                                                                                                                                                      Synthetic.
```

diabetes and hypertension. This sequence

Taiji M;

Ichihara J,

```
0
                                                                                                                                                                                                                                                              MRSA; methicillin resistant Staphylococcus aureus; probe; hybridisation; mecA; MRSE; Staphylococcus epidermis; primer; PCR; polymerase chain reaction; ss.
                                                 Gaps
                                                 ·.
                      4.4%; Score 12.8; DB 1; Length 18; 37.5%; Pred. No. 4.7e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                      Primer 4 to amplify mecA gene probe to detect MRS.
Sequence 18 BP; 5 A; 0 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                              BP.
                                                                          915 ATTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                       93DE-04338119.
                                   87.5%;
                                                                                                 0
                                                                                                                                                              AAQ86985 standard; DNA; 19
                                                                                                                                                                                                               (first entry)
                                                                                               17 ATCATCATCACCA
                                   Best Local Similarity 87.5
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                       08-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                              11-MAY-1995
```

ADB80921 standard; DNA; 18 BP.

RESULT 346 ADB80921

g

à

ADB80921;

EXXX EXXX

```
à
                                                                                                                                                                                                                                                                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                      Primer 3 and 4 (AAQ86978-79) were used to amplify a 467 bp nucleotide sequence (AAQ86977) from S. aureus capable of hybridising with the DNA or RNA of methicillin resistant S. aureus (MRSA). The probe is specifically derived from the mecA gene of S. aureus and S. epidermidis. The mecA gene product has no homology with Known PBPs (penicillin-binding proteins). The new probes allow for the rapid identification of all MRS, eradicating need for labour intensive in vitro cultivation and physiological assays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT30546-T30558 represent probes for the J chains of an antibody produced by the hybridoma cell HNK-20. AAT30555-T30558 represent probes for the Jheavy chain of the HNK-20 antibody. HNK-20 is a murine hybridoma cell line, that produces IgA specific for the F glycoprotein of respiratory syncytial virus (RSV). The variable chain coding sequences (see AAT30456-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antibody, HNK-20; variable heavy chain; hybridoma; murine; IgA; mouse; F glycoprotein; respiratory syncytial virus; RSV; constant region gene; chimeric antibody; isotype-switched antibody; therapy; infection; human; pneumonia; bronchiolitis; animal; polymerase chain reaction; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DNA encoding variable region of antibody HNK-20 - for treating respiratory syncytial virus infection.
                                                                                                                  Detection of methicillin resistant Staphylococcus - using an oligo:nucleotide derived from the mecA gene.
                                                                                                                                                                                                                                                                                                                                        4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Probe JH3 for HNK-20 Jheavy chain coding sequence.
                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 6 A; 7 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                              Example 2; Page 13; 14pp; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example; Page 55; 75pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                    917 TATCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95WO-US015716.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94US-00348548
93DE-04338119
                                                                                                                                                                                                                                                                                                                                                                                                                                  TATCTTCACCAACACC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT30557 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 87.5'
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ٦
.
                                                         Endermann R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Berdoz J, Kraehenbuhl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1996-286826/29.
                                                                                    WPI; 1995-180108/24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ORAV-) ORAVAX INC.
                           (FARB ) BAYER AG.
08-NOV-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9616974-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-DEC-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-FEB-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-JUN-1996
                                                         Springer W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                               Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT30557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT30557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
```

```
·:
T30458) were isolated using primers specific for the 5' untranslated region of the variable region, and for the intron downstream of the rearranged J region (see AAT30459-T30545). The amplified sequences can be inserted into vectors containing heterologous (such as human) constant region genes, for the production of chimeric and isotype-switched antibodies. The antibodies are useful in the treatment and diagnosis of infection by RSV, such as pneumonia and bronchiolitis, in humans and animals. By using genomic DNA as a template, variable region genes can be isolated without producing fragments that have to be adapted for recombinant antibody expression. Also, by using the genomic DNA, no knowledge of the DNA sequence encoding the target variable region is required. Chimeric antibodies produced from the encoded proteins, that contain the constant region of the host being treated, are less likely to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   detect the lacz gene which had been injected into C57B1/6 mice using a recombinant adeno-associated virus (AAV) vector. This confirmed the adeno-associated virus vector can be used to deliver a therapeutic molecule to the liver of a mammal. This can be used for the expression of therapeutic molecules such as secretory proteins, antisense molecules or ribozymes, in the liver, especially to treat hepatic diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            lacz; adeno-associated virus vector; therapeutic; liver; hepatic disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AAV26433 and 26434) were used to amplify and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel adeno-associated viral vectors - for liver specific delivery of
                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Yoder MC;
                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                             4.4%; Score 12.8; DB 1; Length 19; 7.5%; Pred. No. 5e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chloemer RH, Wang X,
                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 19; 32pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Srivastava A, Ponnazhagan S, (
Zhou S, Escobedo J, Dwarki V;
                                                                                                                                                                                                                                                                                   cause adverse immune reactions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ss; PCR; primer; amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97WO-US015453.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96US-0025616P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              96US-0025649P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ccadadrcccrrddcc 18
                                                                                                                                                                                                                                                                                                                                                                                      87.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV26433 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The lacZ-specific primers
                                                                                                                                                                                                                                                                                                                                                                                                                                                        752 CCAGGGTCCCTAGGCC
                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 87.5
Les 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  lacZ-specific primer 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhou S, Escobedo J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   therapeutic molecule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (INDV ) UNIV INDIANA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1998-193255/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (CHIR ) CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9809524-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            36-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-SEP-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           L2-MAR-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV26433;
                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 349
                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV26433/
```

Sequence 19 BP; 3 A; 1 C; 9 G; 6 T; 0 U; 0 Other;

BP.

AAA96546 standard; DNA; 19

AAA96546/C

(first entry)

08-FEB-2001

AAA96546;

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to a mammalian PG1 gene and protein, and a set of PG1 biallelic markers. The PG1 polymucleotide and biallelic markers are used in a hybridisation assay, a sequencing assay, or in an allelespecific amplification assay for determining the identity of a nucleotide at a FG1-related biallelic marker. The methods can be used to detect and to assess the risk of developing cancer or prostate cancer. Early-stage diagnosis of prostate cancer relies on prostate specific antigat (PSA) dosage. However, the effectiveness of this is limited due to its inhibitive of discriminate between malignant and non-malignant affections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PG1 gene; biallelic marker; PCR primer; PG1-related biallelic marker; cancer; prostate cancer; diagnosis; therapy; prostate specific antigen;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Use of a prostate cancer associated gene and biallelic markers derived
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          of the organ. A need exists for both a reliable diagnostic procedure which would enable early-stage diagnosis, and for preventative and curative treatments of the disease. The PG1 gene can be used for detection of prostate cancer, and the risk of developing it in the future, and can also be used to determine therapies for the disease
                                                                                Gaps
                                                                                ;
0
Score 12.8; DB 1; Length 19;
Pred. No. 5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 5e+02; cive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bougueleret L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 5 A; 11 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR primer for PG1 biallelic marker 99-1480-290.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chumakov I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 4; Page 370; 385pp; English
                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                    AAZ01333 standard; DNA; 19 BP.
                                                                                                                                                      920 CATCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-IB002133
           Query Match
Best Local Similarity 87.5%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-00996306
98US-0099658P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                        CATAACCACCACGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 87.5
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-405178/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GEST ) GENSET.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PSA; human; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   W09932644-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                    19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAZ01333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cohen D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             from it.
                                                                                                                                                                                                                                                                                                                           RESULT 350
                                                                                                                                                                                                                                                                                                                                                                       AAZ01333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A COURT OF C
                                                                                                                                                      ð
                                                                                                                                                                                                                    g
```

```
The specification describes a method for detecting mycobacteria, especially for differentiating, in diagnostic terms, an immunisation resulting from BCG vaccination or an infection by M. tuberculosis. The method comprises detection of polymuclectide sequences that are deleted from the genome of Mycobacterium bovis but present in the genome of M. tuberculosis, or vice versa. The polymuclectide sequences that are deleted are the following genes or open reading frames (ORFS): Rv2346c, Rv2347c, Rv2348c, plcC, plcB, plcA, Rv2352c, Rv2352c, Rv3425, Rv3426, Rv3427c, Rv3428c, plcC, plcB, plcA, Rv255c, Rv255c, Rv3425, Rv346c, Rv3427c, Rv3512c, Rv3620c, Rv3641c, Rv1965, mce3, Rv1967c, Rv1977, ephA, Rv2075, cehAl, Rv023c, Rv3621c, Rv3622c, lpdG, cobL, Rv2073c, Rv2074, Rv2075c, echAl, Rv023c, Rv3621c, Rv362c, lpdG, cobL, Rv2073c, Rv2074, Rv2075c, echAl, Rv023c, Rv3621c, Rv362c, lpdG, cobL, Rv2073c, Rv2074, Rv2075c, echAl, Rv023c, Rv204c, Rv01-ORF1, Rv01-ORF2, plcD, Rv02-ORF1, Rv02-ORF1, Rv02-ORF2, gequence sallows discrimination between mycobacteria. The present sequence represents a PCR primer which is used to in the method of the invention, to identify the deleted polynucleotide sequences
                                                                                                                                                                                                                                                                                                            Rv2346c; Rv2347c; Rv2348c; plcC; plcB; plcA; Rv2352c; Rv2353c; Rv3425; Rv3426; Rv3426c; Rv3428c; Rv3428c; Rv1964; Rv1965; mee3; Rv1967; Rv1968; Rv1969; lpm; Rv1971; Rv1972; Rv1974; Rv1975; Rv1976c; Rv1976; Rv1976; Rv2076c; Rv3619c; Rv3620c; Rv3621c; Rv3622c; lpqG; cobl; Rv2073c; Rv2074; Rv2075; echAl; Rv0223c; Rv2024c; Rv01-ORF1; Rv01-ORF2; plcD; Rv02-ORF1; Rv02-ORF2; Rv02-ORF1; Rv0
                                                                                                                                                                                                                                                                              Mycobacteria; immunisation; BCG vaccination; Mycobacterium tuberculosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New nucleic acid sequences that are deleted from the genome of Mycobacterium bovis BCG but present in the genome of M. tuberculosis, useful as a vaccine against mycobacteria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                            Primer used to amplify a polynucleotide sequence from a DU1 region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Garnier T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Buchrieser-Brosch R, Billault A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 25; Page 87; 96pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901 GCTTCTGCGATCAGAT 916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-MAR-2000; 2000WO-FR000637.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99FR-00003250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF62443 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 GCGTCGGCGATCAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 87.5
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (INSP ) INST PASTEUR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2000-579445/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mycobacterium bovis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gordon S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200055362-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAF62443;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cole S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF62443
q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
```

ó

ö

Gaps

; 0

918 ATCATCACCACCACC 933

ð

||| |||||||| ||||| |||| ATCTTCACCACAACCC 18

RESULT 351

```
Example 5; Page 26; 38pp; English
                 Bell JI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCTGGTCATAGGACT 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAD17652 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-MAR-2001; 2001WO-US007880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13-MAR-2000; 2000US-0188983P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCTGGCCAGAGGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (REGC ) UNIV CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Devlin AM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-582462/65.
                                                WPI; 2001-451865/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200168897-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Halsted CH,
                                                                                                                                                                                                                                                                                                                                                                 invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAD17652;
                Hunt PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            folates.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAD17652
   엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present sequence is a PCR primer used to isolate the VRN1 coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Autoimmune thyroid disease; interleukin; promoter; IL-4; polymorphism; autoimmune hypothyroidism; Grave's disease; PCR-haplotyping; genotyping;
                                                                                                                                                                                                                                                                                                                                            Novel VRNI polynucleotide sequence encoding a polypeptide which alters vernalization response of plant in which VRNI nucleic acid is expressed, useful for influencing and assessing vernalization phenotype of plants.
                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention provides the protein and coding sequences of Arabidopsis thaliana VRNI. This protein is capable of altering the vernalisation responses of a plant. Also provided are a number of PCR primers used to isolate the sequences. The sequences are useful in the production of crop plants, where they are able to control the timing of flowering, the duration of vernalisation required, the optimum temperature, or even eliminate the need for vernalisation completely. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 5e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Interleukin-4 (IL-4) receptor allele specific sense primer.
                                                            VRN1; vernalisation; flowering; crop; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 19 BP; 0 A; 5 C; 4 G; 10 T; 0 U; 0 Other;
                              A thaliana VRN1 gene PCR primer V17.
                                                                                                                                                                                                                                                                                                                                                                                                        Claim 10; Page 76; 91pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             829 GTCTCTTTTCTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAH22933 standard; DNA; 19 BP
                                                                                                                                                                                    13-SEP-2000; 2000WO-GB003525.
                                                                                                                                                                                                                     99GB-00022071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-JAN-2000; 2000GB-00000563.
                                                                                                                                                                                                                                                  (PLAN-) PLANT BIOSCIENCE LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-JAN-2001; 2001WO-GB000112.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS INNOVATION LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               autoimmune hypothyroidis
PCR primer; IL-1 RA; ss.
                                                                                           Arabidopsis thaliana.
(first
                                                                                                                                                                                                                                                                                                              WPI; 2001-273467/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                 Dean C, Levy YY;
                                                                                                                          WO200121822-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200151657-A2
                                                                                                                                                                                                                     17-SEP-1999;
                                                                                                                                                       29-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAH22933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAH22933/
```

```
٥,
                                                                                                                                                                                                                                                                                                                                                                                                                              predisposition to autoimmune thyroid disease or establishing any genetic basis for autoimmune thyroid disease, the symptoms of which are manifested in a human subject. The method involves determining the genotype of the subject at the -590 position of promoter region of the IL-4 gene or at one or more polymorphic loci in linkage disequilibrium with the IL-4 -590 c/t polymorphism. The method is useful for determining a predisposition to autoimmune thyroid disease such as autoimmune hypothyroidism or grave's disease in a human subject. Sequences AAH22924-935 represent allele-specific primers for various interleukin (IL-1) sequences, used for PCR-haplotyping in the genotyping methodology of the
Screening human subject for predisposition to autoimmune thyroid disease such as autoimmune hypothyroidism/Grave's disease, by determining genotype of subject at specified position of promoter region of IL-4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Screening an individual for increased risk of low folate status, comprises detecting mutation in human glutamate carboxypeptidase II gene which affects ability of hydrolyzing terminal glutamates from dietary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, glutamate carboxypeptidase II, GCDII gene, dietary folate, FGCP, folypoly-gamma-glutamate carboxypeptidase, hyperhomocyteinaemia, cardiovascular disease, Alzheimer's disease, neural tube defect, congenital heart defect, colon cancer, PCR primer, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                  The invention provides a method of screening a human subject for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 4.4%; Score 12.8; DB 1; Length 19; Best Local Similarity 87.5%; Pred. No. 5e+02; Matches 14; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human GCPII gene exon-11 amplifying PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 19 BP; 4 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                  Example 1; Page 26; 31pp; English.
```

The patent discloses methods for screening an individual for increased risk of low folate status. The method involves detecting a mutation in the human bylatamate carboxypeptidase (GFD) II gene in a biological sample from said individual, wherein detection of the mutation is indicative of decreased ability of an individual to hydrolyse terminal glutamate residues from dietary folates by folypoly-gamma-glutamate carboxypeptidase (FGCP), a product of GFDII gene. The decreased ability is associated with low folate status. The method is useful for screening an individual for increased risk of low folate status and conditions associated with hyperhomocyteinaemia, cardiovascular disease, colon cancer and altered cognition in the elderly including Alzheimer's disease. Pregnant women with low folate status are at increased risk of bearing children with neural tube defects and congenital heart defects. The present DNA sequence is a PCR primer which is used for amplifying exon-11 of GCPII gene. This primer is designed from PSMA genomic sequence and is used for detecting a mutation in GCPII gene 

Seguence 19 BP; 1 A; 3 C; 9 G; 6 T; 0 U; 0 Other;

Gaps ; Query Match 4.4%; Score 12.8; DB 1; Length 19; Best Local Similarity 87.5%; Pred. No. 5e+02; Matches 14; Conservative 0; Mismatches 2; Indels ð

g

ABL44139 standard; DNA; 19 RESULT 355

BP.

ABL44139;

(first entry) 11-APR-2002 Human chromosome 1p36-35 PCR primer SEQ ID NO:1183.

chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome; PCR primer; ss. Human;

Homo sapiens.

JP2001321190-A.

20-NOV-2001

12-MAR-2001; 2001JP-00068285

10-MAR-2000; 2000JP-00066716

(RIKA ) RIKAGAKU KENKYUSHO. GENOTEX YG. (GENO-)

WPI; 2002-144136/19.

Arraying genome clones.

Claim 4; Page 28; 528pp; Japanese.

The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the markers is changed so that the same discrimination Nos. succeed to the marker is changed so that the same discrimination Nos. succeed to the marker markimum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. are mixed respectively in each wells of longitudinal 

resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified by using the above primer; (g) signals are detected from the amplified broducts; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABL42957 to ABL45322 represent For primers for human chromosome 1956-35 DNA, and ABL45323 to ABL45634 represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention the mixed clones are cultured and the 4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 5e+02; Sequence 19 BP; 4 A; 9 C; 2 G; 4 T; 0 U; 0 Other; Query Match 

Gaps . 0 Indels 5 0; Mismatches Best Local Similarity 87.5 Matches 14; Conservative

· 0

799 AGAGCICICCICCAAC 814 AGATCTCTCCCCAAC 18 셤 ò

RESULT 356 AAL48252,

· 0

BP. AAL48252 standard; DNA; 19

AAL48252;

(first entry) 03-OCT-2002

Ribozyme; catalytic nucleic acid; infection; PCR; random library; ss. 

Ribozyme target identification assay library sequence #4.

Synthetic

WO200246449-A2.

13-JUN-2002.

07-DEC-2001; 2001WO-US046178.

07-DEC-2000; 2000US-0251810P

(UYPE-) UNIV PENNSYLVANIA STATE

Clawson G,

WPI; 2002-519672/55.

Identifying cleavage sites of a target RNA, by adding target RNA to library of nucleic acids e.g. ribozyme, which comprise catalytic core flanked by random nucleotides and isolating nucleic acid that cleave target RNA

Example 1; Page 31; 79pp; English.

The present invention relates to a method of identifying cleavage sites in a target RNA which are accessible to a ribozyme comprising a catalytic core flamked by random nucleotides. A target RNA is added to the library of nucleic and nucleic acids that bind to and/or cleave the target RNA are isolated. The method is useful for identifying ribozyme cleavage sites in sequences and in real time PCR assays. The present sequence is random library sequence used in the exemplification of the invention

Sequence 19 BP; 5 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

Gaps . 4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 5e+02; Indels 2; 0; Mismatches 14; Conservative Local Similarity Query Match Matches

ö

745 TAGGGTCCCAGGGTCC 760

ð d

16 radddriccaddarcc 1

```
to a nucleic acid encoding human or mouse tumour necrosis factor receptor 2 (TNFR2). Also described is a method for inhibiting expression of human or mouse TNFR2 comprising contacting cells or tissues in vitro with one of the claimed compounds. The antisense compounds are used to treat a disease or condition associated with expression of TNFR2. The present sequence represents a PCR probe for human TNFR2, which is used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes compounds of 8-30 nucleobases antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New compounds antisense to nucleic acid encoding human or mouse tumor necrosis factor receptor 2 are useful to treat disease associated with mouse tumor necrosis factor receptor 2 expression.
                                                                                                                                                          Tumour necrosis factor receptor 2; TNFR2; antisense oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.4%; Score 12.8; DB 1; Length 19;
87.5%; Pred. No. 5e+n2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 3 A; 9 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                          Human TNFR2 PCR probe SEQ ID NO:6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 13; Col 44; 69pp; English
                              ABQ74756 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                      27-APR-2001; 2001US-00844634.
                                                                                                                                                                                                                                                                                                                                      27-APR-2001; 2001US-00844634
                                                                                          24-OCT-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                    Bennett CF, Watt AT;
                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-606814/65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                           PCR probe; ss.
                                                                                                                                                                                                                                        US6410324-B1.
                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                        25-JUN-2002.
                                                            ABQ74756;
RESULT 357
             ABQ74756/
```

The present invention describes human ATP-binding cassette transporters (ABC). Specifically described are the human ABCAS, ABCA6, ABCA9 and ABCA10. Specifically described are the human ABCAS, ABCA6, ABCA9 and ABCA10 qenes (See ARM89594 to ABM895915 represent ABCA5, ABCA6, Described to ABR89715 represent ABCA5, ABCA6, ABCA9 and ABCA10 genes which are used in the exemplification of the present invention. The ABC sequences have carrianteriosclerotic activities and can be used in gene therapy. ABC sequences can be used in the manufacture of a medicament intended for the prevention and/or treatment of a subject affected by a dysfunction in the reverse transport of cholesterol. The ABC proteins are involved in the reverse transport of cholesterol, in membrane transport of lipophilic molecules, in particular inflammation medicating substance such as prostaglandins and prostacyclins, or in any pathology whose candidate conformation in the prostaglandins and prostacyclins, or in any pathology whose candidate conformation and prostacyclins or in any pathology whose candidate conformation and prostacyclins or in any pathology whose candidate conformation and prostacyclins or in any pathology whose candidate conformation and prostacyclins or in any pathology whose candidate conformation and prostacyclins or in any pathology whose candidate conformation of a medicament intended for prevention of arteriosclerosis in various forms. The ABCA5, ABCA6, ABCA9 and ABCA10 constant intended for prevention of genes are located to chromosome 17, more specifically to the 17924 locus

A novel nucleic acid corresponding to ATP-binding cassette transporter genes and the encoded polypeptide, useful for preventing or treating a dysfunction in reverse transport of cholesterol.

Claim 9; Page 106; 216pp; English.

Rosier-Montus M, Prades C, Arnould-Reguigne I;

Dean M;

Allikmets R,

Denefle P, Duverger N,

WPI; 2002-557584/59.

(AVET ) AVENTIS PHARMA SA. (USSH ) US DEPT HEALTH & HUMAN SERVICES

07-DEC-2001; 2001WO-EP015401. 07-DEC-2000; 2000EP-00403440. 23-JAN-2001; 2001US-0263231P.

WO200246458-A2.

13-JUN-2002

```
ö
            Gaps
            0;
           Indels
Pred. No. 5e+02;
0; Mismatches
                             778 AGGGCAGCCCCTCTGG 793
        Matches 14; Conservative
                             à
```

; 0

Gaps

0

4.4%; Score 12.8; DB 1; Length 19; 37.5%; Pred. No. 5e+02; ve 0; Mismatches 2; Indels

87.5%;

Best Local Similarity

Query Match Matches 820

805 CTCCTCCAACTCAGGG 14; Conservative

ò

16 crecrecarcacades 1

BP.

ACC48039 standard; DNA; 19

ACC48039

ACC48039;

11-AUG-2003 (first entry)

Sequence 19 BP; 3 A; 3 C; 8 G; 5 T; 0 U; 0 Other;

Human; ABCA5; ABCA6; ABCA9; ABCA10; ATP-binding cassette transporter; chromosome 17; chromosome 17q24; antiarteriosclerotic; gene therapy; cholesterol; lipophilic molecule; inflammation; prostaglandin; prostacyclin; arteriosclerosis; transport; PCR primer; ss. Human ABCA6 specific PCR primer SEQ ID NO:149. ABN89738 standard; DNA; 19 BP 17 AGGCCAGCCCGTTTGG 2 18-SEP-2002 (first entry) ABN89738; RESULT 358 ABN89738, 

Homo sapiens

Nucleic acid amplification; genotyping; single nucleotide polymorphism; chromosome painting; Southern blotting; RFLP; nucleic acid sequencing; restirction fragment length polymorphism; c-Jun; PCR; primer; ss. Human c-jun gene amplifying right primer c-Jun U9. WO2003033724-A2. Homo sapiens. 24-APR-2003. 

```
The invention relates to amplifying a whole genome which involves exposing cells to alkaline conditions to form a cell lysate comprising a whole genome, reducing the pH of the cell lysate to form a stabilized cell lysate, and incubating the stabilized cell lysate under conditions that promote replication of the genome, where replication of the genome results in replicated strands. The methods and compositions of the present invention are useful for the exponential amplification of noticing cites, including genotyping of single nucleotide polymorphisms (SNPs), chromosome painting, Southern blotting and restirction fragment length polymorphism (RtPLP) analysis, subcloning and DNA sequencing. Sequences ACC48031-040 represent sequence-specific right primers used for PCR amplification of the human c-Jun gene
                                                                                                                                                                                                            Amplification of nucleic acid sequences by displacing replicated strands from the target sequence, useful in genotyping of single nucleotide polymorphisms, chromosome painting, Southern blotting, subcloning and DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lasken R3, Fang L, Faruqi AF, Alsmadi OA, Driscoll MD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ss; primer; PCR; human; whole genome amplification;
bacterial strain identification; degraded genomic DNA amplification;
forensic material amplification;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      restriction fragment length polymorphism; RFLP-based testing; c-jun
                                                                                                                               Driscoll MD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.4%; Score 12.8; DB 1; Length 19; 87.5%; Pred. No. 5e+02; Live 0; Mismatches 2; Indels
                                                                                                                               Alsmadi OA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19 BP; 5 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                   Faruqi FA,
                                                                                                                                                                                                                                                                                                  Example 10; Page 154; 202pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human c-jun specific PCR primer #39.
                                                                                                                                 Fang L, Fa
M, Song W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       705 CAGCGAGICCCAGGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MOLE-) MOLECULAR STAGING INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-OCT-2002; 2002US-00272465.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-OCT-2001; 2001US-00977868.
18-OCT-2001; 2001US-00982212.
                                                                                                 (MOLE-) MOLECULAR STAGING INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATGGAGTCCCAGGAG 18
                                             15-OCT-2001; 2001US-00977868.
18-OCT-2001; 2001US-00982212.
               15-OCT-2002; 2002WO-US033244.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADD31365 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                   Lasken RS,
Wisniewski
                                                                                                                                                                                    WPI; 2003-430349/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003143587-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-JUL-2003
                                                                                                                                                                                                                                                                        sequencing
                                                                                                                                   Dean FB,
Hosono S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Dean FB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADD31365;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
```

ö

Gaps

```
The invention relates to a method of amplifying whole genome. The method is useful for amplifying a whole genome, for identification of bacterial strains by amplification of microbial DNA, for obtaining enough DNA from unculturable organisms for sequencing or other studies, for amplification of degraded genomic DNA and amplification of forensic material for restriction fragment length polymorphism (RFLP)-based testing. The present sequence represents a primer specific for human c-jun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The sequence is from the exon of the Valpha7 gene of the T cell receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Diagnosis of auto:immune disease and antibodies for disease treatment
by detecting RFLP encoding variable region of T-cell antigen receptor
                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Restriction fragment length polymorphism; RFLP; T cell receptor;
                                              Amplifying a whole genome by replication of genome resulting in replicated strands that is displaced from the genome by strand displacement replication of another replicated strand.
                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                              Length 19;
                                                                                                                                                                                                                                                                                          2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Concannon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Portion of TCR Valpha7 gene exon contg. polymorphism.
                                                                                                                                                                                                                                        Sequence 19 BP; 5 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                 8; DB 1;
5e+02;
                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Beall SS,
                                                                                                                                                                                                                                                                4.4%; Score 12.8;
87.5%; Pred. No. 5e
                                                                                                       Example 10; SEQ ID NO 39; 86pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /label= polymorphism
/note= "G -> C"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 81; Page 129; 181pp; English.
3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CALY ) CALIFORNIA INST OF TECHN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hood LE,
Song
                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                         705 CAGCGAGTCCCAGGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          89US-00459065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    89US-00459065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90US-00517380
                                                                                                                                                                                                                                                                                                                                                 3 cargadreceadad 18
                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ12608 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ಗ
                                                                                                                                                                                                                                                                               Best Local Similarity 87.5
Matches 14; Conservative
 Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zaller DM,
Wisniewski
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    variable region; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1991-222662/30.
                         WPI; 2003-829787/77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Key
Misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-DEC-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-DEC-1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9109623-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-MAR-2003
03-OCT-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-JUL-1991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      oeta-chain.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Jrban JL,
Hosono S,
                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ12608;
                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                           RESULT 361
                                                                                                                                                                                                                                                                                                                                                                                                         AAQ12608/
                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                   g
```

ö

0;

Gaps

```
This sequence represents a probe for hepatitis b virus (HBV), used in the method of the invention for detection and/or genetic analysis of hepatitis B virus (HBV) in a sample. The method comprises: (a) optionally releasing, isolating or concentrating polymucleic acids (I) in the sample, and amplifying the relevant part of a suitable HBV gene in the sample with at least I suitable primer pair; (b) hybridising (I) with a combination of at least 2 nucleotide probes, which are applied to known locations on a solid support and hybridise specifically to mutant target sequences chosen from the HBV RT pol gene region, HBV precore region, HBAB region and/or HBV genotype specific target sequences, or their complements or U for T homologues; (c) detecting the hybrids formed in step (b), and inferring the HBV genotype and/or mutants present in the sample from the differential hybridistation signal(s). The composition can be used to diagnose and/or monitor HBV mutants and/or genotypes in a sample, specifically genotype, precore mutations, vaccine escape
and contains a polymorphism (tag a). The nucleotide at position 10 is normally a "G". The polymorhic gene was identified when PCR prods. from several unrelated individuals were electro- phoresed through a denaturing gradient gel. The gel discriminates DNA sequence differences on the basis of altered melting properties of allelic forms of the same gene. They can also be detected by Southern blot/RFLP procedures. Presence of the polymorphism may indicate a predisposition to disease. See also AAQ12609-Q12623. (Updated on 25-MAR-2003 to correct PA field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Probe; hepatitis b virus; HBV detection; RT pol region; genetic analysis; preCore region; HBsAg region; genotype specific target; mutation detection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Detection and/or genetic analysis of hepatitis B virus - specifically genotype, preCore mutations, vaccine escape mutations and RT gene mutations selected by treatment with drugs.
                                                                                                                                                                                                                                                                    .,
                                                                                                                                                                                                                      4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 5.4e+02; ative 0; Mismatches 4; Indels
                                                                                                                                                                               Sequence 19 BP; 4 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Probe HBPr198 for Hepatitis b virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 31; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Maertens G;
                                                                                                                                                                                                                                                                                                      931 CCCTCCAGAGAATTTTACG 949
                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                             CCATCCAGAGCATTGTAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97WO-EP002002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96EP-00870053
                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV14305 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (INNO-) INNOGENETICS NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rossau R,
                                                                                                                                                                                                  Query Match
Best Local Similarity
Thes 15; Conserve
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1997-535867/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9740193-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stuyver L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV14305;
                                                                                                                                                                                                                                                                                                                                           19
                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 362
  $$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                         g
```

```
ö
mutations and RT gene mutations selected by treatment with drugs, e.g. lamivudune and penciclovir. (Updated on 27-AUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV10720-V10747 are primers used in a method to identify the novel human breast cancer gene CH8-2a13-1 by differential display. The identified genes or fragments of these genes can be used for identifying genes and gene products that are intimately related to malignant transformation or maintenance of the malignant properties of cancer cells. It can also be used to design or screen diagnostic reagents or therapeutic compounds. Kits are included within the scope of the invention
                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Breast cancer genes - used to develop products to design or screen
                                                                                                                                                                                                                                                                                                                                                                Breast cancer; malignant transformation; diagnostic; therapeutic; screening; primer; ss.
                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
0
                                                                          Score 12.6; DB 1; Length 19;
Pred. No. 5.4e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ch 4.3%; Score 12.6; DB 1; Length 19; 1 Similarity 78.9%; Pred. No. 5.4e+02; 15; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                    Human breast cancer gene CH8-2a13-1 primer pch8-2rb.
                                            Sequence 19 BP; 4 A; 1 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CALP-) CALIFORNIA PACIFIC MEDICAL CENT RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19 BP; 6 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnostic reagents or therapeutic compounds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure, Fig 10; 118pp; English.
                                                                                                                                    730 GGTCATAGGACTTGGTAGG 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          864 CAGTIGGAACACTITCCTG 882
                                                                                                                                                                  GGTTAAAGGTCTTTGTAGG 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19 cadriradadcacigircig 1
                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96US-0015167P.
96WO-US009286.
96US-0019202P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97WO-US005930.
                                                                          4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96US-00678280
                                                                                                                                                                                                                                          AAV10731 standard; DNA; 19
                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                       15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 1997-512705/47
                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chen L;
                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9738085-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LO-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-JUN-1996;
11-JUL-1996;
                                                                                                                                                                                                                                                                                                      21-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                        AAV10731;
                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Smith H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                              RESULT 363
                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                            AAV10731,
SSX8
                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   원
```

RESULT 364 AAT93724/c 96WO-US015730.

Mon Jul 12 11:21:14 2004

```
01-OCT-1996;
                         06-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                   AAX09251;
                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                     pairs
                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                             RESULT 366
                                                                                                                                                                                                                                                                                                                                                       AAX09251/
                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bacillus thuringiensis; nematocide; pesticide; biological control; toxin; corn rootworm; Diabrotica; crystal protein; CryV; endotoxin; primer; PCR; polymerase chain reaction; 16D RNA; ss.
                                                                                                                                                                                                                                                                                                                                  phosphoenolpyruvate carboxylase. The storage lipid content of a seed is increased by reducing the activity of endogenous cytosolic pyruvate kinase in the seed. This is applied to plants which accumulate storage protein and lipid in the embryo, particularly an oilseed plant such as soya, sunflower, sesame or especially rapessed. Inhibitory enzymes involved in amino acid biosynthesis increases production of lipid by directing more of the precursor to the chloroplast
                                                                         primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                           Increasing storage lipid content in seeds and plants - by inhibiting cytosolic pyruvate kinase.
                                                                         Brassica napus; cytosolic pyruvate kinase; storage lipid; PCR primer storage protein; oilseed plant; phosphoenolpyruvate carboxylase; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                            primer was used to amplify Brassica napus DNA encoding a
                                                                                                                                                                                                                                                                                                                                                                                                                               4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 5.4e+02; ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                       Ξ
                                                       Primer 3 for B. napus phosphoenolpyruvate carboxylase DNA
                                                                                                                                                                                                                                         Iwabuchi
                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19 BP; 4 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                          Imamura J,
                                                                                                                                                                                                                                                                                                          Disclosure; Page 7; 28pp; English.
                                                                                                                                                                                                                                           Murase M, Murase J, Hayakawa T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16S rRNA gene PCR primer rRNAfor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        782 CAGCCCCTCTGGTGCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 casscccrrssrcaas
                                                                                                                                                                        97EP-00101622
                                                                                                                                                                                           96JP-00016590
                                                                                                                                                                                                             (MITS ) MITSUBISHI CORP. (MITU ) MITSUBISHI CHEM CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT62499 standard; DNA; 19
 AAT93724 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                           WPI; 1997-387486/36
                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
Les 15; Conserv
                                                                                                                  Brassica napus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9712980-A1
                                                                                                                                                                        31-JAN-1997;
                                                                                                                                                                                           01-FEB-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-AUG-1997
                                       27-FEB-1998
                                                                                                                                    EP787801-A2
                                                                                                                                                       06-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT62499
                   AAT93724;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT62499,
 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           П
```

```
16S rRNA gene primers rRNAfor (AAT62499) and rRNArev (AAT62500) were used as internal positive controls in PCR techniques to amplify Bacillus thuringiensis toxin genes using cryV-specific primers (see also AAT62493-97). The 16S rRNA gene primers yield a PCR-amplified fragment of 182 bp corresponding to nucleotides 1188-1370 in the sequence. This size is smaller than fragments expected from any of the cryV-specific primer
                                                                                                                                                                                                                                                           New Bacillus thuringiensis isolates - polynucleotide sequences encoding toxins useful for controlling nematode and coleopteran pests.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Polymorphism; biallelic; human; forensic; paternity testing; disease; detection; phenotypic typing; characteristic; infection; hereditary; autoimmune disease; cancer; inflammation; drug; therapy; medicament; treatment; marker; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated nucleic acid segments from the human genome - used for determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human biallelic polymorphic marker upstream primer #131.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 19 BP; 4 A; 2 C; 11 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 12.6; DB 1;
Pred. No. 5.4e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (WHED ) WHITEHEAD INST BIOMEDICAL RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 15; Page 61; 310pp; English
                                                                                                                                                                                                                                                                                                                                                      Example 4; Page 18; 46pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       920 CATCACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19 CATCCCCACCTTCCTCCGG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hudson T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96US-0030455P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97WO-US020313
95US-00540104
96US-00620717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               78.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX09251 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity 78.9
es 15; Conservative
                                                                                    (MYCO ) MYCOGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wang D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-286974/25
                                                                                                                                                                                                           WPI; 1997-226223/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9820165-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-NOV-1996;
                                                                                                                                                 Feitelson JS;
                                 21-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lander ES,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic
```

ô

AAX09121-X1026B are allele-specific oligonucleotide primers used in the isolation of various biallelic polymorphic markers found in the human genome (represented in AAX10269-X12937). These primers can be used in a method for determining polymorphic forms in an individual for use in e.g. forensics, paternity testing or for phenotypic typing for diseases such as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Addrich syndrome, Pabry's disease, familial hypercholesterolemia, polycystic kidney disease, harditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary camerorytagic telangiectasia, familial colonic polyposis, Ehlers-Danlos syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous system, infection by pathogenic microorganisms, and characteristics such as longevity, appearance (e.g. baldness, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid segments can also be used to produce medicaments for the treatment or prophylaxis of such diseases

Sequence 19 BP; 6 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

DB 1; Length 19; 4; Indels Score 12.6; DB 1; Pred. No. 5.4e+02; 0; Mismatches 4; 783 AGCCCCTCTGGTGCCAAGA 801 ; 0 4.3%; Best Local Similarity 78.9 Matches 15; Conservative à

. 0

Gaps

·.

19 AGCTTTTCTGGTGCCAACA 1

AAV40967 standard, DNA; 19 BP AAV40967; AAV40967 

25-SEP-1998 (first entry)

Primer TLSERG:649U19 for abnormality detection.

PCR primer; chromosomal abnormality; abnormality detection; leukaemia; lymphoma; carcinoma; adenocarcinoma; sarcoma; glioma; neuroblastoma; medullablastoma; malignant melanoma; malignant neoplastic condition; ss.

Synthetic

Homo sapiens.

11-JUN-1998

WO9824928-A2

97WO-DK000556. 08-DEC-1997;

96DK-00001401. 06-DEC-1996;

(PALL/) PALLISGAARD N.

Pallisgaard N, Hokland P;

WPI; 1998-33344/29.

Detection of chromosomal abnormalities - by subjecting patient nucleic acids to a multiplex molecular amplification procedure primers specific for characteristic nucleic acid sequence.

Claim 73; Page 79; 126pp; English

This sequence represents a primer used in the method of the invention for the detection of the presence or absence of chromosomal abnormalities, each abnormality being associated with a condition in a subject and each being defined by at least one characteristic nucleic acid sequence. The method comprises: (a) obtaining a sample of nucleic acids derived from a

subject which may harbour one of the chromosomal abnormalities; (b)
subjecting the sample to a multiplex molecular amplification (MMA)

procedure, where a number of the characteristic sequences, if present in
a sufficient amount, will be amplified; (c) retrieving the product(s)
from step (b), and detecting the presence and/or absence of an amplicon
characteristic of the abnormal sequences to detect the presence or
absence of corresponding chromosomal abnormalities; where the MMA

procedure comprises the use of at least 7 mutually distinct primers (MDP)
in one single reaction mixture, each of the primers defining an end of at
cal least one characteristic nucleic acid sequence, and where at least one of
the primers defines the first end of at least two characteristic nucleic
acid sequences, the characteristic nucleic acid sequences each being
determined in their opposite ends by MDP selected from the remainder of
the MDP. The methods can be used for detecting chromosomal abnormalities ó; carcinoma's, adenocarcinoma's, sarcoma's, glioma's, neuroblastoma's, medullablastoma, malignant melanoma, and malignant neoplastic conditions Gaps lymphoma's, .; 0 4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 5.4e+02; ive 0; Mismatches 4; Indels associated with diseases including numerous leukaemia's, Sequence 19 BP; 3 A; 3 C; 8 G; 5 T; 0 U; 0 Other; 914 GATTATCATCACCACCACC 932 19 GATTGCCATAACCGCCACC 1 78.98; AAV39343 standard; cDNA; 19 Conservative Local Similarity 15; Query Match RESULT 368 AAV39343/c Matches ð

(first entry) 16-SEP-1998 AAV39343; 

Human genomic DNA PCR primer C2f derived from the C2 EST.

Human, RAD54; hRAD54; cancer; xeroderma pigmentosum; Bloom syndrome;
Werner's syndrome; ATR-X; diagnosis; detection; SNF2 superfamily;
X-linked mental retardation with alpha-thalassemia syndrome; tumour; gene therapy; PCR primer; ss.

Homo sapiens Synthetic.

EP844305-A2.

27-MAY-1998.

97EP-00308998. 10-NOV-1997; 96US-0030676P. 13-NOV-1996;

(SMIK ) SMITHKLINE BEECHAM CORP UNIV JEFFERSON THOMAS (UYJE-)

Robbins DJ; Rasio D, Fishel RA, Croce CM,

WPI; 1998-274189/25

Human hRAD54 DNA and polypeptide - and agonists, antibodies, antagonists,

Example; Page 23; 64pp; English.

The present sequence represents a PCR primer used in the example from the present invention. The method of the invention is for determining the genetic predisposition to cancer in an individual by detecting hRADS4 mutations in a sample. hRADS4 is a queen thought to be present in tumours that display allelic imbalance at Ip32, the chromosomal band identified as one of four minimal regions of chromosome 1 deletion in breast

ö

Gaps

; 0

Indels

4,

Mismatches

ö

```
carcinomas. hRAD54 is useful for production of proteins, inter alia, that have been identified as novel hRAD54 by homology between the amino acid sequence given in AAW62186 and known amino acid sequences such as yeast RAD54. hRAD54 proteins are used in the treatment of cancer, including mental retardation with alpha-thalassaemia syndrome and breast cancer. hRAD54 polynucleotides are also useful for detecting complementary nucleotides for use as a diagnostic agent, especially useful for diagnosis of disease or susceptibility to diseases. hRAD54 polynucleotide, proteins, agonists and antagonists which are proteins are useful in gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            primer AAA11091 (see AAV4559) for the PCR amplification of novel mouse prostatic acid phosphatase (PAP) cDNA from mouse prostate. The primers are based on partial mouse PAP clones obtained by 5' and 3'RACE (see AAV45593-98). The isolated full-length cDNA includes a 1158 bp coding region (see AAV45592) encoding a 385-amino acid polypeptide (see AAW30574). PAP cDNA can be used in the recombinant production of mouse PAP. A method for producing an immune response against an autologous polypeptide tumour antigen (e.g. human PAP) involves immunising a subject with a xenogeneic antigen (e.g. mouse PAP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   to induce an immune response
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This is the nucleotide sequence of primer AAA31093, which was used with
                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mouse; tumour related antigen; ss.
                                                                                                                                                                                                                                                                            ·,
                                                                                                                                                                                                                                      Score 12.6; DB 1; Length 19;
Pred. No. 5.4e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Reverse primer A31093 for mouse PAP amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 19 BP; 2 A; 8 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                          G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mouse prostatic acid phosphatase - used inst tumour related antigens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Yang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 1; Page 12; 30pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Prostatic acid phosphatase; PAP; diagnosis; vaccine; PCR; primer;
                                                                                                                                                                                                                                                                                                             844 TGAAGACAGCGTCCTGGCT 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shapero MH,
                                                                                                                                                                                                                                                                                                                                         rgaagacaagrcagggcr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US007232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97US-0043301P.
                                                                                                                                                                                                                                           Query Match 4.3%;
Best Local Similarity 78.9%;
Matches 15; Conservative
                                                                                                                                                                                                           Sequence 19 BP; 3 A; 6 C; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                AAV45600 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DENDREON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-009335/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ruegg CL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9846769-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV45600,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Laus R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DEND-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Was sp
                                                                                                                                                                                                                                                                                                                                                                                               RESULT 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New
                                                                                                                                                                                                                                                                                                                                                                                                             AAV45600
                                                                                                                                                                                                                                                                                                                                                                                                                                  qq
            à
```

Score 12.6; DB 1; Length 19; Pred. No. 5.4e+02;

4.3%;

Query Match Best Local Similarity

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX34376-X34391 as probes for the detection of mutant BRCA1 and BRCA2 genes. The probes are immobilised on a membrane and labelled target mucleotide sequences, which hybridise to the probes, are detected after a single hybridization step. The method and allele-specific oligonucleotides are used to detect gene mutations that predispose individuals to breast and ovarian cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    pNEUGO; neuronal-specific 7 transmembrane protein; human; therapy; AMD; age-related macular degeneration; ophthalmological; screening; diagnosis;
                                                                                                                                                                                                                        amplification, exon 2; human, BRCA1; BRCA2; allele, probe; 1; detection; mutation; breast; ovarian; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Detection of BRCA1 and BRCA2 gene mutations in a single hybridization
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to the use of allele-specific oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PCR primer DHRD.91.R3 for mutational analysis of human pNEU60 DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                Wild type BRCA1 exon 20 allele-specific probe 5382WT-2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19 BP; 8 A; 5 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 12.6; DB 1;
Pred. No. 5.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 10; Page 16; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     704 CCAGCGAGTCCCAGGAGAG 722
                         887 GCACTIACTICICAGCIIC 905
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAAGAGATCCCAGGACAG
                                                                                                                                                                                                                                                                                                                                                             98WO-US020256.
                                                   GCACTICCTGCTGAGCTCC
                                                                                                                                                                                                                                                                                                                                                                                         97US-0059729P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAD00248 standard; DNA; 19
                                                                                                                     AAX34383 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15; Conservative
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                  (ONCO-) ONCORMED INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                              Farrow J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-254727/21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                            Primer; PCR; am
hybridisation;
                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                         23-SEP-1997;
                                                                                                                                                                         06-JUL-1999
                                                                                                                                                                                                                                                                                                           W09915704-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-AUG-2000
                                                                                                                                                                                                                                                                                                                                     01-APR-1999
 15;
                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                              Rabin MB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAD00248;
                                                                                                                                               AAX34383;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
 Matches
                                                                                                       AAX34383
                                                                                            RESULT
                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MAX BX BX BX BX BX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                  g
                           à
```

```
New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves
                                                              WPI; 2000-350730/30
                                                                                                                                                                                                                                                                 (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                 WPI; 2000-412314/35
               WO200024888-A1
                                                                                                                                                                                                                                  WO200032765-A2,
       Homo sapiens
                               20-OCT-1999;
                                      26-OCT-1998;
                                                                                                                                                                                                                                                 06-DEC-1999;
                                                                                                                                                                                                                                                         04-DEC-1998;
                       04-MAY-2000
                                                                                                                                                                                                  04-DEC-2000
                                                      Weber BHF,
                                                                                                                                                                                                                                         08-JUN-2000
                                                                                                                                                               19
                                                                                                                                                                                          AAA82806;
                                                                                                                                                                                                                          Mammalia
                                                                                                                                                                                                                                                                         Tritz R,
                                                                                                                                                                           RESULT 372
                                                                                                                                                                               AAA82806/
셤
                                                                                                                                                                                   8
```

```
RNA encoding a cyclin or cell-cycle dependent kinase other than CDK1, PCNA and Cyclin B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-412314/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Welch PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200032765-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                   AAA85310;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mammalia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fritz R,
                                                                                                                                                                                                                                                                                                                                             RESULT 373
                                                                                                                                                                                                                                                                                                                                                           AAA85310
                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                    qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                       mutational analysis of human neuronal-specific 7 transmembrane DNA, by MDEUGO. The major site of pNEUGO expression is the sensory neuroretina. Mutations of this gene is associated with the etiology of age-related macular degeneration (AMD). This sequence has ophthalmological activity. The pNEUGO polypeptides and polymoleotides are used for screening, diagnosis and therapy of macular degeneration. The DNA sequences are useful for detection of pNEUGO mutation carriers, prenatal pNEUGO screening and diagnosis of AMD, and in gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribozyme, hairpin, hammerhead, gene therapy, vasotropic, restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
mutation carrier; prenatal screening; gene therapy; PCR primer; ss.
                                                                                                                                                                                                                                           Neuronal-specific 7 transmembrane protein used for diagnosis and treatment of patients with macular degeneration.
                                                                                                                                                                                                                                                                                                              The present DNA sequence is the PCR primer DHRD.91.R3, used for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 12.6; DB 1; Length 19;
Pred. No. 5.4e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 19 BP; 4 A; 1 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Robbins JM;
                                                                                                                                                                                                                                                                                   Disclosure; Fig 5; 37pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 921 ATCACCACCACCTCCAGA 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Barber JR,
                                                                                                                                                           (MULT-) MULTIGENE BIOTECH GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cdk3 ribozyme binding site #91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВР
                                                                                                        99WO-EP007969.
                                                                                                                                   98EP-00120231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Arcrecaecrecergeaca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US028772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0110954P
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity /0..
Best Local Similarity /0..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA82806 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                        Sauer C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Welch PJ,
```

```
·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·:
0
                                                            The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDK1, PCNA and CYClin B1.
Representative examples of ribozyme recognition sites are given in AAA88415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme in resistant to endonuclease activity and hence is efficient in restenosis treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to a hairpin or hammerhead ribozyme, designed to cleave RNA encoding a cyclin or cell-cycle dependent kinase other than cell-cycle dependent kinases CDKI, PCNA and Cyclin B1. Representative examples of ribozyme recognition sites are given in AAA83415 to AAA86787. The ribozyme of the invention is useful for inhibiting restenosis by introduction of the ribozyme into cells. The ribozyme is resistant to endonuclease activity and hence is efficient in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribozyme; hairpin; hammerhead; gene therapy; vasotropic; restenosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New hairpin and hammerhead ribozyme for inhibiting restenosis, cleaves RNA encoding a cyclin or cell-cycle dependent kinase other than CDKI, PCNA and Cyclin BI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                        Score 12.6; DB 1; Length 19;
Pred. No. 5.4e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 12.6; DB 1; Length 19;
Pred. No. 5.4e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 4 A; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Robbins JM;
Disclosure; Page 52; 109pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cyclin H ribozyme binding site #109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure, Page 90; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    857 CIGGCICCAGIIGGAACAC 875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Barber JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 crescrecadarresecae 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                           4.38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US028772.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0110954P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 4.3%;
Best Local Similarity 78.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA85310 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 78.9
Matches 15, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
```

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                       which bind to the CXC used to treat e.g. cancers and
                                                                                                                                                                                                                                                                                                                                                                          pCR primers AAF85361-62 were used to amplify DNA encoding a human Bonzo polypeptide. Bonzo is a CXC chemokine receptor. The specification describes a method for identifying agents (especially antibodies) which bind to Bonzo and inhibit the binding of a ligand (especially SExCkine) and the agents per se. The agents identified may be used for the treatment of a disorder/disease related to aberrant Bonzo expression and activity, such as inflammatory disease, cancers and/or infections (e.g.
                                                                                                                                             CXC chemokine receptor; inflammatory disease; cancer; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DHS; senescence-induced deoxyhypusine synthase; senescence inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                            PCR primer used to amplify DNA encoding a human Bonzo polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 5.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence 19 BP; 4 A; 5 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                    Wu L;
                                                                                                                                                                                                                                                                                                                       Identifying agents (especially antibodies) chemokine receptor Bonzo, and which may be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                            bacterial and fungal infections)
                                                                                                                                                                                                                                                                                    Wilbanks AM,
                                                                                                                                                                                                                                                                                                                                                           Example 10; Page 105; 191pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .,
          934 TCCAGAGAATTTTACGCAA 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19
                       TCCAGAGATTTTGAGGAAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Arabidopsis DHS PCR primer #1.
                                                                        BP.
                                                                                                                                                                                                                                22-NOV-2000; 2000WO-US032206.
                                                                                                                                                                                                                                                  99US-00449437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 776 TGAGGGCAGCCCCTCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Transecretericaeer
                                                                                                                                                                                                                                                                   (MILL-) MILLENNIUM PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF32052 standard; DNA; 19
                                                                        AAF85362 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                     Murphy KE,
                                                                                                                                                                                                                                                                                                     WPI; 2001-343947/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 15; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PCR primer; ss.
                                                                                                                                                                                           WO200137872-A1.
                                                                                                                                                        PCR primer; ss
                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                  24-NOV-1999;
                                                                                                                                                                                                                                                                                                                                          inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-APR-2001
                                                                                                                                                                                                                                                                                    Briskin MJ,
                                                                                                             23-JUL-2001
                                                                                                                                                                                                             31-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ч
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAF32052;
                                                                                          AAF85362
                                                                                                                                                 Bonzo;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 375
                                                       RESULT 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF32052,
                                                                 AAF85362
                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAX BX BX BX BX BX
            à
                           d
```

```
decoxympusine synthase (DHS; see AARTS1051 and AAB66875). The senescence-induced DHS coding sequence, when introduced into a plant cell in reverse orientation, inhibits expression of the endogenous senescence-induced DHS gene, and/or reduces or prevents activation of eIF-5A. DHS is useful for altering age-related senescence and/or environmental stress-related senescence, for inhibiting seed aging and for increasing seed yield in a plant. In addition, the inhibition of senescence in a plant results in increased resistance of the plant to environmental stress-induced and/or pathogen-induced senescence, increased plant biomass, delayed fruit softening and spoilage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tomato, Arabidopsis and carnation cDNA clones encoding senescence-induced deoxyhypusine synthase and eIF-5a, useful for inhibiting senescence in a plant when introduced in reverse orientation into the genome of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, inflammatory bowel disease 1 protein; IBD1; IBD1prox; intestinal inflammatory disease; apoptosis; NF-Kappa B; cancer; inflammatory disease; immune disease; cryptogenetic inflammation; hemorrhagic rectocolitis; Crohn's disease; Blau syndrome; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence is a PCR primer for Arabidopsis senescence-induced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Primer for studying biallelic polymorphic markers in the IBD1 region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 5.4e+02; tive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 19 BP; 4 A; 1 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 6; Page 48; 135pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     914 GATTATCATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATCTTCCTCAACACCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-MAR-2000; 2000FR-00003832.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-MAR-2000; 2000FR-00003832.
                                                                                                                                                                                                 06-JUL-2000; 2000WO-US018364.
                                                                                                                                                                                                                                                              99US-00348675
                                                                                                                                                                                                                                                                                         19-JUN-2000; 2000US-00597771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAI65656 standard; DNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                             걾
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         Wang T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-061978/07.
                                                                                                                                                                                                                                                                                                                                                            (SENE-) SENESCO INC
                                                                WO200102592-A2.
Arabidopsis sp
                                                                                                                                                                                                                                                                                                                                                                                                                         Thompson JE,
                                                                                                                                                                                                                                                       06-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FR2806739-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-SEP-2001.
                                                                                                                                11-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         plant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AA165656
```

·

Gaps

```
Primers AA165647-78 were used to characterise biallelic polymorphic markers in the IBD1 gene region. The IBD1 gene encodes an inflammatory bowel disease 1 (IBD1) polypeptide, which is associated with intestinal inflammatory disease. The specification also describes a polypeptide which is in proximity to IBD1, and is designated IBD1prox. The IBD1 gene is probably involved in regulation of geophosis and activation of NF-ckappa B. The IBD1 and IBD1prox polymucleotides are is useful as source of probes and primers, as source of (anti) sense oligonucleotides, for recombinant production of polypeptides, and in screening for interactive compounds. The polypeptides are used to raise specific antibodies which useful for diagnostic detection or purification of IBD1 and IBD1prox polymucleotides and polypeptides are useful for screen for specific binding agents, potential therapeutic agents. The IBD1 and IBD1prox polymucleotides and polypeptides are useful for treatment and prevention of inflammatory and/or immune diseases or cancer, where associated with mutations in genes corresponding to IBD1 and IBD1prox, especially cryptogenetic inflammation of the intestines (hemorrhagic rectocolitis, Crohn's disease and Blau syndrome)
                                                                                                                                                                                                                               New human nucleic acids associated with intestinal inflammatory diskuseful for diagnosis, prognosis and control of these diseases, also
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 19 BP; 1 A; 6 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                         Example 4; Page 86; 97pp; French.
(DAUS-) FOND DAUSSET-CEPH JEAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH57968 standard; DNA; 19
                                                                             Hugot JP, Thomas G,
                                                                                                                                                      WPI; 2001-608364/70
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
les 15; Conserv
                                                                                                                                                                                                                                                                                                                related proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAH57968;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAH57968/
THE STATE OF STATE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 5.4e+02; tive 0; Mismatches 4; Indels 891 TIACTICTCAGCTICTGCG 909 rrggrrcrcagcrccagcg 19 Conservative

ö

Gaps

. 0

BP

(first entry) 10-SEP-2001

Cell-cycle dependent kinase cdk3 ribozyme binding site SEQ ID NO:392.

Human, ribozyme therapy, hairpin ribozyme, hammerhead ribozyme, recognition site; target, ribozyme binding site; eye disease; vulnerary, proliferative disease; skin disease, psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase, cyclin, MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermatological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratolytic; gene therapy; viral wart; atopic dermatitis; actinic keratosis; squamous cell carcinoma; basal cell carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss

Homo sapiens Synthetic.

03-MAY-2001

WO200130362-A2

26-OCT-2000; 2000WO-US029500

99US-0161532P 26-OCT-1999;

(IMMU-) IMMUSOL INC.

Tritz R; Robbins JM,

WPI; 2001-300427/31

disease,

Chamaillard M;

Lesage S,

Zouali M,

Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.

Example 1; Page 100; 408pp; English.

inflammation, matrix metalloproteinase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (I). (I) can have antipooriatic, dermatological, cytostatic, antisteborrheic, antidiabetic, antistickling, cophthalmological, vulnerary, keratolytic and virucide activities, and cleaves RNA encoding cytokine involved in inflammation. (I) can be used in gene therapy. (I) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, vitreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retining and preventing scarring such as keloid, adhesion and hypertrophic or hypertrophic burn and the sequences used in the The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a exemplification of the present invention 

Sequence 19 BP; 4 A; 6 C; 6 G; 3 T; 0 U; 0 Other;

Gaps 0 4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 5.4e+02; rative 0; Mismatches 4; Indels Conservative Local Similarity Les 15; Conserv Query Match Matches

ö

857 CTGGCTCCAGTTGGAACAC 875 19 CIGGCICCAGATIGGGCAC d

AAH60472 standard; DNA; 19 AAH60472; RESULT 378 **AAH604** 

BP

(first entry) 10-SEP-2001

Cyclin H ribozyme binding site SEQ ID NO:2896.

Human; ribozyme therapy; hairpin ribozyme; hammerhead ribozyme; recognition site; target; ribozyme binding site; eye disease; vulnerary; proliferative disease; skin disease; psoriasis; diabetic retinopathy; cytokine; inflammation; cell-cycle dependent kinase; cyclin; MMP; matrix metalloproteinase; growth factor; reductase; scarring; cytostatic; antipsoriatic; dermathological; antiseborrheic; antidiabetic; virucide; antisickling; ophthalmological; keratosis; squamous cell carcinoma; atcopic dermatitis; actinic keratosis; squamous cell carcinoma; carcinoma; seborrheic wart; vitreoretinopathy; scar; sickle cell retinopathy; ss. cell 

Homo sapiens Synthetic.

40200130362-A2

03-MAY-2001.

26-OCT-2000; 2000WO-US029500.

```
WPI; 2002-156696/21.
                                                                                                                                                                                                                                                                                                  invention
                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABS59868;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 380
                                                                                                                                                                                                                                                                                                                                                                 Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABS59868
à
                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes a method for treating a proliferative skin or eye disease and scarring. The method involves administering a ribozyme (1) which cleaves RNA encoding a cytokine involved in inflammation, matrix metalloproteriase (MMP), cyclin, cell-cycle dependent kinase, growth factor or a reductase, or administering a nucleic acid molecule (II) comprising a promoter operably linked to a nucleic acid segment encoding (1). (1) can have antipsoriatic, dermatological, cytostatic, antiseborrheic, antidiabetic, antisickling, ophthalmological, vulnerary, keratolytic and wirucide activities, and cleaves RNA encoding cytokine involved in inflammation. (1) can be used in gene therapy. (1) and (II) are useful for treating proliferative skin diseases such as psoriasis, atopic dermatitis, actinic keratosis, squamous or basal cell carcinoma and viral or seborrheic wart. They can also be used for treating proliferative eye diseases such as diabetic retinopathy, virreoretinopathy, sickle cell retinopathy, retinopathy of prematurity and retinal detachment, and for treating and preventing cararing such as keloid, adhesion and hypertrophic or hypertrophic burn scar. AMHS7577 to AAH62099 represent sequences used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                    Treating proliferative skin or eye diseases and scarring, using ribozymes that cleave RNA encoding cytokines involved in inflammation, matrix metalloproteinases, growth factors and cell-cycle dependent kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HIV-1 related binding molecule oligonucleotide sequence SEQ ID NO:146.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Binding molecule; HIV-1; human immunodeficiency virus type 1; reverse transcriptase; binding group; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 12.6; DB 1; Length 19;
Pred. No. 5.4e+02;
0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 7 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                   exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (AMST-) AMSTERDAM SUPPORT DIAGNOSTICS BV.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Loukachov VV, Van Gemen B, Goudsmit J;
                                                                                                                                                         Example 1; Page 282; 408pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        934 TCCAGAGAATTTTACGCAA 952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 rccadadarrirgaddaaa 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immunodeficiency virus 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABL88924 standard; DNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-JUL-2000; 2000EP-00202611.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-JUL-2000; 2000EP-00202611
  99US-0161532P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 78.9
Matches 15; Conservative
                                                    Tritz R;
                                                                             WPI; 2001-300427/31.
                           (IMMU-) IMMUSOL INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EP1174518-A1.
  26-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-JAN-2002
                                                   Robbins JM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABL88924;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABL88924/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
```

```
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Aminopeptidase P; XPNEP2; bradykinin receptor B1; ds; SNP; BDKRB1; tachykinin receptor B1; TACR1; C1 esterase inhibitor; C1NH; kallikrein 1; KLK1; bradykinin receptor B2; BDKRB2; gene therapy and addykinin receptor B2; BDKRB2; gene therapy is angiotensin converting enzyme 2; ACE2; protease inhibitor 4; P14; polymorphism; haemangioma; tumour; sarcoma; Crohn's disease; trachoma; cardiovascular disease; angina pectoris; hypertension; heart failure; myocardial infarction; ventricular hypertrophy; vascular disease; aneurysm; embolism; thrombosis; coronary artery disease; angioedaema; autoimmune disease; inflammatory arthritis; cancer; wound; viral infection; bacterial infection; fungal infection; COPD; chronic obstructive pulmonary disease; enterocolitis;
                                                                                                                                                                                                                                                                                                            The present invention describes a collection of binding groups for a family of nucleic acids comprising members of relative high and relative low significance, where the binding groups are selected to be capable to identify, alone or in combination, essentially all members of the family of nucleic acids of relatively high significance. The collection of binding groups is useful for typing of nucleic acid in a clinical sample, by contacting the nucleic acid with the collection and determining whether one or more binding groups bound to the nucleic acid of the eample. This method is useful for determining whether the sample comprises at least a part of a member of relatively high significance of a family of nucleic acids. The collection of binding groups is useful for diagnosaing the severity of a disease caused by a pathogen containing a member of a family of nucleic acids. ABL88779 to ABL89321 represent
                                               essentially
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
Collection of binding groups for determining or typing samples, especially clinical samples, has groups capable to identify ess all members of the family of nucleic acids of relatively high
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human DNA representing a single nucleotide polymorphism #18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match 4.3%; Score 12.6; DB 1; Length 19; Local Similarity 78.9%; Pred. No. 5.4e+02; les 15; Conservative 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 19 BP; 12 A; 3 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                         Disclosure; Page 42; 166pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            821 TIGGCIGIGICICITICI 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (BRIM ) BRISTOL-MYERS SQUIBB CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              single-nucleotide polymorphism.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19 rregraciererritrici 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABS59868 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2000; 2000US-0251015P.
23-JAN-2001; 2001US-0263678P.
02-MAR-2001; 2001US-0273037P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-DEC-2001; 2001WO-US047235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200261131-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-AUG-2002.
```

```
Unidiatorida polymorphisms comprising additional 5. and 3. Lianking genomic comparisons comprising obtaining the sample from one or more individuals and determining the nucleic acid sample from one or more individuals and determining the nucleic acid sequence at one or more polymorphic positions in a gene encoding a protein selected from the group above; (3) constructing (M2) haplotypes using the genes comprising grouping at least two nucleic acids (c) (4) identifying (M3) an individual at risk of developing a disorder upon administration of an ACE inhibitor and/or vasopeptidase inhibitor upon administration of an ACE inhibitor and/or vasopeptidase inhibitor comprises one or more polymorphic positions within a gene encoding a individual comprising obtaining a nucleic acid sample, determining the individual comprising obtaining a nucleic acid sample, determining the comprises one or more polymorphic position, and comparing at least one position with a known data set. The genes, (M1, M2, M3 and M4) and compositions are useful for detecting, diagnosing, treating, convexing the various disorders such as angloedeam and diseases which involve anglogenesis like haemangionas, tumours, sarcomas, Crohn's disease, trachomas, and cardiovascular diseases like angina pectoris, thypertrophy, vascular diseases, and cardiovascular diseases, inflammatory arteriosclerosis and/or atherosclerosis, and comparing or convexing antiment of seases inflammatory conversed or such the function of three or convexing the convexing th
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   encoding aminopeptidase P (KPNEP2), bradykinin receptor B1 (BDKRB1), tachykinin receptor B1 (TACR1), C1 esterase inhibitor (C1NH), kallikrein [KLKI], bradykinin receptor B2 (BDKRB2), angiotensin converting enzyme 2 (ACE2) or protease inhibitor 4 (P14), comprising at least one polymorphic position. Also included are (1) a probe that hybridises to a polymorphic position as provided in the detailed summary of single nucleotide polymorphisms comprising additional 5, and 3' flanking genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    polynucleotides are also useful for chromosome identification. Antibodies against the proteins may be utilised for immunophenotyping of cell lines and biological samples. The present sequence represents or contains the region surrounding a single- nucleotide polymorphism in one of the genes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hypersensitivity reactions, sepsis, autoimmune diseases, inflammatory arthritis, cancer, wounds, viral, bacterial or fungal infection, Chronic obstructive pulmonary disease (COPD) and enterocolitis (many other diseases and disorders are listed in the specification). The
                                                                                                                                                                                                                                                             New isolated nucleic acid with at least one polymorphic position, useful
                                                                                                                                                                                                                                                                                     detecting, diagnosing and treating disorders such as angloedema, cer, viral, bacterial or fungal infection, cardiovascular and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The invention relates to an isolated nucleic acid from a human gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 19 BP; 2 A; 3 C; 6 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             encoding one of the proteins listed above
                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 648; 977pp; English.
                                                                                            Z, Hui L,
Powell JR;
                                                                                                                                                                                            WPI; 2002-619265/66.
                                                                                                                                                                                                                                                                                                                                                                autoimmune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                  Swanson BN,
                                                                                               Fsuchihashi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                  (HUILL/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
à
```

ö Gaps .. 0 4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 5.4e+02; Ative 0; Mismatches 4; Indels 15; Conservative

817 AGGGTTGGCTGTGTCTCTT 835 AGGATTGGCTCTGGCTTTT 19

ABK88370 standard; DNA; 19 ABK88370; ABK88370/ EXHXEXE

07-OCT-2002 (first entry)

Arabidopsis deoxyhypusine synthase, DHS, PCR primer #1.

ss; PCR; deoxyhypusine synthase; DHS; senescence; eIF-5A; primer; eukaryotic initiation factor 5A; plant; cell death; disease resistance; antisense; blossom end rot; environmental stress; pathogen resistance; shelf-life; perishable fruit; flower; vegetable

Arabidopsis sp.

Perrone MH;

Ma-Edmonds M,

Zerba KE,

(TSUC/) TSUCHIHASHI Z.

WO200244392-A2.

06-JUN-2002.

29-NOV-2001; 2001WO-US044505

29-NOV-2000; 2000US-00725019.

(SENE-) SENESCO TECHNOLOGIES INC.

Lu DL; Thompson JE, Wang T, WPI; 2002-557545/59. Increasing resistance to physiological disease in plant, by integrating gene or its fragment encoding senescence-induced deoxyhypusine synthase or eIF5A in antisense orientation into plant genome and growing the plant

Example 6; Page 42; 114pp; English.

The invention relates to increasing resistance to physiological disease in a plant, involving integrating into the plant genome a vector having attisences esquences complementary to corresponding portion of one strand of bulls are sequences complementary to corresponding portion of one strand of DNA encoding endogenous senescence-induced of DNA encoding endogenous senescence-induced corresponding portion of RNA sequence encoded by eIP-5A gene or DHS gene, and growing the plant. Also included is a plant or its progeny, where the plant is derived from a cell having inhibited or reduced expression of senescence-induced DHS, senescence induced eIF-5A, or both, where the cell is produced by the method of the invention. The method is useful for increasing resistance to physiological disease such as blossom end rot in a plant. The method results in delayed onset of as blossom end rot in a plant. The method results in delayed onset of correct on a plant shelf-life and/or growth period. The method delays deterioration and spoilage of perishable fruits, flowers, vegetables, and plants, increases the shelf-life of perishable fruits, flowers, regetables, and plants, and renders their tissues more stress-clowed to isolate a partial Arabidopsis deoxyhypusine synthase cDNA 

Sequence 19 BP; 4 A; 1 C; 9 G; 5 T; 0 U; 0 Other;

Gaps ö 4.3%; Score 12.6; DB 1; Length 19; 78.9%; Pred. No. 5.4e+02; Live 0; Mismatches 4; Indels Local Similarity 78.9 nes 15; Conservative Query Match Matches

ö

914 GATTATCATCACCACCACC 932 19 GATCTTCCTCAACACCACC

ð 셤

ABL44510 standard; DNA; 19 ABL44510; ABL44510 

RESULT 382

BP

11-APR-2002 (first entry)

Human chromosome 1p36-35 PCR primer SEQ ID NO:1554.

Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome; PCR primer; ss.

```
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in method comprises: (b) a clones of the genomic libraries contained in multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the marker is changed so that the same discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. cored to alscrimination Nos. are maxed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones and the reconstituted as the positions on the chromosome and arrayed. The clones are increased for human chromosome 219521, which are ABL45323 to ABL45334 to 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; LL-5; LCAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mouse TNF-a hammerhead ribozyme target sequence (nt position 1398).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.3%; Score 12.6; DB 1; Length 19; 18.9%; Pred. No. 5.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           specifically claimed for use in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Seguence 19 BP; 2 A; 7 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 4; Page 35; 528pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       786 CCCTCTGGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 cacrererrececagneer 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT56370 standard; RNA; 15 BP
                                                                                                                                                           12-MAR-2001; 2001JP-00068285
                                                                                                                                                                                                              10-MAR-2000; 2000JP-00066716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           78.98;
                                                                                                                                                                                                                                                               RIKA ) RIKAGAKU KENKYUSHO,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 78.9'
Matches 15; Conservative
                                                                                                                                                                                                                                                                                                                                                                                            Arraying genome clones.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (revised)
                                                                                                                                                                                                                                                                                                                                         WPI; 2002-144136/19.
                                                                                                                                                                                                                                                                                        GENO-) GENOTEX YG.
                                                   JP2001321190-A.
     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAR-2003
14-MAY-1997
                                                                                                       20-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT56370;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 383
AAT56370/c
```

```
The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves TNF-alpha mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit TNF-alpha expression, making them potentially useful for treating rheumatoid arthritis, septic shock and other inflammatory disorders including psoriasis, as well as for treatment of AIDS. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.3%; Score 12.4; DB 1; Length 15; 92.9%; Pred. No. 4.3e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 3 A; 4 C; 4 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 2; Page 252; 407pp; English.
                                                                                                                                                                                                                                                                                                                     94US-00245736.
94US-00271280.
94US-00291932.
                                                                                                                                                                                                                                                                                                                                                                                         94US-00291433.
94US-00292620.
94US-00293520.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           94US-00300000
94US-00303039.
94US-00311486.
94US-00311749.
94US-00316771.
                                                                                                                                                                                                                                                                         94US-00227958.
94US-00228041.
                                                                                                                                     95WO-IB000156
                                                                                                                                                                                                                             94US-00222795.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94US-00319492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94US-00321993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94US-00334847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94US-00337608
94US-00345516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840 TCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14 TGTCTGAAGACAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1995-351090/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                       15-APR-1994;
15-APR-1994;
18-MAY-1994;
06-JUL-1994;
15-AUG-1994;
17-AUG-1994;
Mus musculus.
                                                                                                                                     23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-0CT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-NOV-1994;
                                                                                       31-AUG-1995,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-SEP-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-NOV-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-NOV-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-DEC-1994
23-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stinchcomb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Grimm S,
Modak A,
Tracz D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
```

ó

THE REAL PROPERTY OF THE REAL

Human; ml acetylcholine receptor; CHRM1; immunogen; antibody; Alzheimer's disease; dementia with Lewy bodies; DLB; allele specific oligonucleotide probe; ss.

Human CHMR1 allele specific oligonucleotide probe #27.

(first entry)

29-AUG-2001

AAS02967;

AAS02967 standard; DNA; 15 BP

RESULT 385

AAS02967

```
/*tag= b
/note= "n represents (egl)3 where egl = -NH-CH2-CH2-O-CH2
-CH2-O-CH2-C(=0)-"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A method has been developed for killing or inhibiting the growth of bacteria by contacting the bacteria with a peptide nucleic acid (PNA). The PNA is targeted to messenger or ribosomal RNA. The antibacterial composition has bacteriostatic and bactericidal properties. The PNA can be used to treat a mammal suffering from a bacterial infection where the PNA is complementary to a region of ribosomal RNA and of mRNA of the bacteria. Further treatment may include concurrent treatment with an antibiotic. The PNA can also be used as a method of disinfection by solution) and rimining the object with a sterile liquid to remove the PNA. The invention provides new ways of tackling bacterial infections which have become resistant to frequently used antibiotics. The present sequence represents a PNA from an example of the present invention
                                                                                                                                                                                                                                                                                                                                                                   /*tag= c /note= "t is attached to an amidated lysine residue e.g. -t-Lys-NH2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Killing or inhibiting bacterial growth by using a peptide nucleic acid.
                                                                                                                                                  Beta-galactosidase; peptide nucleic acid; PNA; antibacterial;
growth inhibition; antibiotic; bacteria; infection; disinfectant; ss.
                                                                                                                                                                                                                                                             /*tag= a
/note= "N-acetyl (2-aminoethyl) glycine backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.3%; Score 12.4; DB 1; Length 15; 86.7%; Pred. No. 4.3e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 0 A; 4 C; 0 G; 10 T; 0 U; 1 Other;
                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 18; Page 31; 97pp; English.
                                                                                                                       Peptide nucleic acid SEQ ID NO:19.
                              AAX33145 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-US019199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-00932140
                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (NIEL/) NIELSEN P E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Good L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-254325/21.
                                                                                                                                                                                                                                             nodified base
                                                                                                                                                                                                                                                                                                                                                   modified_base
                                                                                                                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-SEP-1997;
                                                                                       24-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                              WO9913893-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nielsen PE,
                                                                                                                                                                                                Synthetic
                                                            AAX33145
RESULT 384
```

```
·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           The sequence represents an allele specific oligonucleotide probe for according individuals using the Human gene encoding the m1 muscarinic acetylcholine receptor, CHMR1. CHMR1 is one subtype of a family of 5 genetically distinct muscarinic acetylcholine receptors, mAChB, that play important roles in higher brain function such as learning and memory. The protein is a possible drug target for treatments for Alzheimer's disease and antibodies raised against the protein are useful for diagnosing and developing treatments for diseases associated with the abnormal expression of the gene or activity of the protein, e.g. Alzheimer's disease and dementia with Lewy bodies
                                                                                                                                                                                                                                                                                                                                                                            New variants of the ml muscarinic acetylcholine receptor gene, useful to find treatment for Alzheimer's and dementia, have single nucleotide variations at one or more of five polymorphic sites.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleotide sequence of a an egl linked peptide nucleic acid (PNA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.3%; Score 12.4; DB 1; Length 15; 92.9%; Pred. No. 4.3e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                            Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 1 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Peptide nucleic acid; PNA; antibacterial; ss.
                                                                                                                                                                                                                                                                                                                          Denton RR, Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 15; Page 19; 52pp; English.
                                                                                                                                                                                                                                                                                               (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                           12-OCT-2000; 2000WO-US028211.
                                                                                                                                                                                                                                                                      99US-0159269P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAF79917 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      851 AGCGTCCTGGCTCC 864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AGCGCCCTGGCTCC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-282046/29.
                                                                                                                                                                                    WO200127312-A2
                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                    13-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JUN-2001
                                                                                                                                                                                                                19-APR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                          Choi JY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF79917;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF79917
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

. 0

Gaps

0;

830 TCTCTTTTCTTCT 844 TCTCTTTNTTTCTCT 15

à

Conservative

```
modified_base
                                                                                                                                                      modified base
                                                                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                       US6300318-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                09-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX10154;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE STATES AND SERVICE STATES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence represents an egl linked peptide nucleic acid (PNA), which is used in the method of the invention. The specification describes a method for determining target gene function in bacteria. The method comprises providing a nucleotide sequence of the target gene from the bacteria, selecting and preparing PNAs with regions complementary to a part of the nucleotide sequence, in anti-parallel orientation, determining activity of PNA by selected assay to identify active PNA compounds, contacting the bacteria and the active PNA compounds, contacting the bacteria. The method is useful for determining effect of these on the bacteria. The method is useful for useful in the design of antisense antibacterial drugs and gene function analysis in bacteria. The method is used for killing or inhibiting of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Determining bacterial target gene function, involves preparing peptide nucleic acid (PNA) compounds complementary to bacterial nucleotide sequence, determining activity of PNA, contacting active PNA compounds and determining the effect.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bacterial growth inhibitor; bacterial infection; disinfectant; PNA; antibacterial; peptide nucleic acid; ss.
                                                                                                                                 /*tag= b
/note= "N-[acetyl(2-aminoethyl)]-C-lysine-glycine
backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
.
                                                                      /*tag= a
/note= "N-acetyl(2-aminoethyl)glycine backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match

4.3%; Score 12.4; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 4.3e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 0 A; 4 C; 0 G; 10 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Egl linked triplex forming peptide nucleic acid.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 5; Col 13; 34pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAD24265 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                              98US-00049190
                                                                                                                                                                                                                                                                                                                                                       97US-00932140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           830 TCTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTCTTTNTTTCTCT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-256212/26.
                                                                                                                                                                                                                                                                                                                                                                                                (NIEL/) NIELSEN P E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
modified_base
                                               modified base
                                                                                                               modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unidentified
                                                                                                                                                                                                                                                                                                                                                       16-SEP-1997;
                                                                                                                                                                                                                                                                                                              27-MAR-1998;
                                                                                                                                                                                                                        US6190866-B1
                                                                                                                                                                                                                                                                   20-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                           PE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       bacteria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 387
    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    셤
```

```
The patent discloses methods and compositions for killing or inhibiting growth of bacteria comprising contacting the bacteria with a peptide nucleic acid (PRA) complementary to a region of the bacterial inbosomal RNA. The method is used to treat a bacterial infection in a mammal and as a disinfectant. The present sequence is an egl linked peptide nucleic acid (PNA) which is used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Killing or inhibiting growth of bacteria using peptide nucleic acids complementary to a region of the bacterial ribosomal RNA is useful to treat a bacterial infection in a mammal and as a disinfectant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Polymorphism; biallelic; human; forensic; paternity testing; disease; detection; phenotypic typing; characteristic; infection; hereditary; autoimmune disease; cancer; inflammation; drug; therapy; medicament; treatment; marker; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                           /note= "N-[acetyl (2-aminoethyl)]-C-lysine- glycine
                                                                                                                /mod_base= OTHER
/note= "(0-2-aminoethyl-0'-acetyl-ethyleneglycol)3"
/mod_base= OTHER
/note= "N-acetyl (2-aminoethyl) glycine backbone"
                                                                                                                                                                                                                                                /mod_base= OTHER
/note= "N-acetyl (2-aminoethyl) glycine backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.3%; Score 12.4; DB 1; Length 15; 16.7%; Pred. No. 4.3e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human biallelic polymorphic marker downstream primer #460.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 0 A; 4 C; 0 G; 10 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 18; Col 18; 32pp; English.
                                                                                                                                                                                                             J= c
base= OTHER
                                                                                                                                                                                                                                                                                                                                                                       /mod base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ВР.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97US-00932140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-00932140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 4.3%;
Best Local Similarity 86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     830 TCTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               reterrintricie 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX10154 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                         Q
                                                                                                                                                                                                                                                                                                                                       ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                    backbone"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                      /*tag=
                                                                                                                                                                                                                                                                                                                                          /*tag=
                                                                                                                                                                                                                    *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nielsen PE, Good L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (NIEL/) NIELSEN P E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-033179/04.
```

.. 0

99WO-US006507.

24-MAR-1999;

07-0CT-1999

```
Sequence 16 BP; 1 A; 3 C; 7 G; 5 T; 0 U; 0 Other;
                            WPI; 1998-286974/25.
                                                                                                  Best Local Similarity
         05-NOV-1997;
              06-NOV-1996;
    14-MAY-1998
                       Lander ES,
                                                                                                                              AAA18464;
                                                                                                Query Match
                                                                                                              7
                                                                                                                       Matches
à
```

818 GGGTTGGCTGTGTC 831 GGGTTGGCAGTGTC 15 13; Conservative

Homo sapiens

W09950403-A2

```
AAX09121-X10268 are allele-specific oligonuclectide primers used in the isolation of various biallelic polymorphic markers found in the human genome (represented in AAX10269-X12937). These primers can be used in a method for determining polymorphic forms in an individual for use in e.g. forensics, paternity testing or for phenotypic typing for diseases such as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease, familial hypercholesterolemia, polycystic kidney disease, hereditary spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary con spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary can be aemorrhadic telanguectasia, familial colonic polyposis, Bhlers-Danlos syndrome, osteogenesis imperfecta, acute intermittent porphyria, autoimmune diseases, inflammation, cancer, diseases of the nervous system, infection by pathogenic microorganisms, and characteristics such system, infection by pathogenic microorganisms, and characteristics such can longwity, appearance (e.g. baldness, obesity), strength, speed, endurance, fertility, and susceptibility or receptivity to particular drugs or therapeutic treatments. The isolated polymorphic nucleic acid control of such diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New isolated nucleic acid segments from the human genome - used for determining polymorphic forms for use in e.g. forensics, paternity testing or phenotypic typing for disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         (WHED ) WHITEHEAD INST BIOMEDICAL RES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 16; Page 207; 310pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wang D, Hudson T;
                                                                                                                                                                                                                                  97WO-US020313.
                                                                                                                                                                                                                                                                                                                                              96US-0030455P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 prophylaxis of such diseases
WO9820165-A2
```

Gaps ; 0 4.3%; Score 12.4; DB 1; Length 16; 92.9%; Pred. No. 4.7e+02; rative 0; Mismatches 1; Indels

ö

Human TIE-2 substrate sequence SEQ ID NO:1690. AAA18464 standard; RNA; 17 BP 19-JUN-2000 (first entry)

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antidiamatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; potvaines stains; angiofibroma; tuberous sclerosis; potvaine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARMT) gene, an integrin subunit beta 3 gene, an integrin subunit beta 3 gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA1768 to AAA1768 to AAA16775 to AAA19156 and AAA1768 to AAA19185 and AAA19087 to CC AAA19154 represent their corresponding target sequences; AAA17685 to AAA19185 and AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to AAA19154 represent their corresponding target sequences; CAA19152 to AAA1922. represent their corresponding target sequences; AAA19223 to AAA2168 to AAA216 to AAA2168 to AAA216 to AAA2168 to AAA2168 to AAA2168 to AAA2168 to AAA2168 to AAA21 .; 0 Novel ribozymes for modulating the synthesis, expression and/or stability Gaps ; 0 Coeshott C, Mcswiggen JA; 4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; Live 0; Mismatches 1; Indels integrin subunit alpha-6, or integrin subunit beta-3 Sequence 17 BP; 4 A; 2 C; 9 G; 0 T; 2 U; 0 Other; of an mRNA encoding an angiogenic factors. Claim 56; Page 96; 305pp; English. Jarvis T, 98US-0079678P 803 CTCTCCTCCAACTC 816 (RIBO-) RIBOZYME PHARM INC. 13; Conservative CICTCCTCGAACIC Roberts E, WPI; 1999-591315/50 Query Match Best Local Similarity 27-MAR-1998; Pavco PA, 17 RESULT 390 AAT53528/c Matches à

Rat ICAM hammerhead ribozyme target sequence (nt. position 1503). Enzymatic nucleic acid, ribozyme, trans cleavage, inhibition, gene expression, downregulation; interleukin-5, IL-5, ICAM-1, intercellular adhesion molecule, rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV, bcr-abl; oncogene; translocation; chronic myelogenous leukaemia, CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; AAT53528 standard; RNA; 17 BP. (first entry) (revised) 25-MAR-2003 27-MAR-1997 AAT53528; 

866 GITGGAACACITIC 879

Mon Jul 12 11:21:14 2004

```
transplant rejection; rheumatoid arthritis; psoriasis;
myocardial ischaemia; Kawasaki disease; septic shock; HIV;
human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                      Stinchcomb DT,
                                                                                                                                                              28-SEP-1994;
03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
                             Rattus rattus
                                                                                                                                   19-AUG-1994;
02-SEP-1994;
08-SEP-1994;
                                        W09523225-A2
                                                                                             15-APR-1994;
15-APR-1994;
18-MAY-1994;
                                                                                                                                                          23-SEP-1994;
                                                                                                                                                                                                                30-JAN-1995;
                                                                                                                                                    23-SEP-1994;
                                                             23-FEB-1995;
                                                                                                              06-JUL-1994
                                                                                                                         16-AUG-1994
                                                                                                                              17-AUG-1994
                                                   31-AUG-1995
                                                                                                                    .5-AUG-1994
                                                                                                                                                                                     NOV-1994
                                                                                                                                                                                          10-NOV-1994
                                                                                                                                                                                                                                            Grimm S,
Modak A,
Tracz D,
```

95US-00380734

94US-00218934. 94US-0022795. 94US-00227958. 94US-00227968. 94US-00245736. 94US-0029132. 94US-0029132. 94US-0029132. 94US-0029132. 94US-0029132. 94US-0039329. 94US-00311749. 94US-00311749. 94US-00311749. 94US-0031877608. 94US-0031877608.

95WO-IB000156

```
The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotide base position indicated in the DB line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatoid arthritis, correct PI field.)
DDT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Favco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                     Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 7 A; 5 C; 2 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; Page 202; 407pp; English.
                                                                                                                                                                                                                                                          WPI; 1995-351090/45
```

Ribozymes having modified bases and methods for producing them - for use

·;

Gaps

; 0

4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; ive 0; Mismatches 1; Indels

Conservative

Query Match Best Local Similarity Local 13; Conserv?

```
Mcswiggen JA;
Ler D, Thompson JD;
                                                                                                                                                                                Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; transplant rejection; rheumatoid arthritis; psoriasis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; human immunodeficiency virus;
                                                                                                                                                            Rat ICAM hammerhead ribozyme target sequence (nt. position 2176).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Dudycz LW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Karpeisky A, Kisich K, Matulic-Adamic J, Mcs
Pavco P, Beigleman L, Sullivan SM, Sweedler
Usman N, Wincott PE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chowrira B, Direnzo A, Draper KG,
                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94US-00227958.
94US-00228041.
94US-00245736.
94US-00271280.
94US-00291932.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94US-00316771.
94US-00319492.
94US-00321993.
94US-00334847.
                                                                                                                                                                                                                                                                                                                                                                                                                                      94US-00218934.
94US-00222795.
94US-00224483.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94US-003000000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94US-00291433.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94US-00311749
94US-00314397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94US-00345516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94US-00311486
                                                                                                                                                                                                                                                                                                                                                                                                     95WO-IB000156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          94US-00293520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94US-00337608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94US-00363233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95US-00380734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM INC.
                                                                               AAT53691 standard; RNA; 17
                                                                                                                              (revised)
(first entry)
           14 GTTGGAACATTTTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1995-351090/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                 Rattus rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19-AUG-1994;
02-SEP-1994;
08-SEP-1994;
23-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-SEP-1994;
28-SEP-1994;
03-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-NOV-1994;
16-DEC-1994;
23-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-APR-1994;
15-APR-1994;
18-MAY-1994;
                                                                                                                            25-MAR-2003
27-MAR-1997
                                                                                                                                                                                                                                                                                                                                                       W09523225-A2
                                                                                                                                                                                                                                                                                                                                                                                                     23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             10-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-OCT-1994;
04-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                            23-FEB-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-0CT-1994
                                                                                                                                                                                                                                                                                                                                                                               31-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-AUG-1994
16-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-APR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Grimm S,
Modak A,
Tracz D,
                                                                                                      AAT53691;
                                                       RESULT 391
                                                                     AAT53691,
                                                                                            Š
```

```
14 GIIGGAACAITIIC 1
                                                                    13; Conservative
                                                                                                              (revised)
                                                             Query Match
Best Local Similarity
                                                                                                                                                                      Rattus rattus.
                                                                                                                                                                                         23-FEB-1995;
                                                                                                                                                                                                                                    19-AUG-1994;
                                                                                                                                                                                                                                 17-AUG-1994;
                                                                                                              25-MAR-2003
                                                                                                                                                                                   31-AUG-1995.
                                                                                                                                                                                                          APR-1994
                                                                                                                                                                                                                           1994;
                                                                                                                                                                                                                              1994;
                                                                                                                                                                                                                                           08-SEP-1994;
                                                                                                                  27-MAR-1997
                                                                                                                                                                                                       04-APR-1994
                                                                                                                                                                                                                 15-APR-1994
                                                                                                                                                                                                                    18-MAY-1994
                                                                                                                                                                                                23-FEB-1994
                                                                                                                                                                                                             15-APR-1994
                                                                                                                                                                                                                           15-AUG-
                                                                                                                                                                                                                             L6-AUG-
                                                                    Matches
                                                                                              ð
                                                                                 g
```

```
Grimm S,
Modak A,
Tracz D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV37795;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV37795,
        à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatoid arthritis, asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; INF-alpha; respiratory syncytial virus; RSV; bcr.abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rat ICAM hammerhead ribozyme target sequence (nt. position 564).
                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                        Length 17;
                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                       Sequence 17 BP; 7 A; 5 C; 2 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                      4.3%; Score 12.4; DB 1; 92.9%; Pred. No. 5.1e+02; ative 0; Mismatches 1;
in inhibiting disease reluted genes.
                            Claim 2; Page 203; 407pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94US - 00218934
94US - 0022795,
94US - 00227958
94US - 00227958
94US - 002841,
94US - 0029132,
94US - 00291332,
94US - 00291332,
94US - 00293220,
94US - 00293220,
94US - 00293220,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT53446 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95WO-IB000156
                                                                                                                                                                                                                                                                                                                                                                   866 GIIGGAACACITIC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present sequence represents a preferred target sequence for an enzymatic nucleoid acid (1.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotide base position indicated in the DB line. Regions of the mRNA that do not form secondary folding structures and that contain potential computer analysis. Ribozymes cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatoid architis, asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                         Larpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Rarpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ribozymes having modified bases and methods for producing them - for use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Interleukin gene; IL-15; inhibitor; oligomer; expression; transcription-inhibiting complex; polypurine-polypyrimidine region; inflammatory poly-arthopathy; rheumatoid arthritis; asthma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 7 A; 5 C; 2 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Interleukin-15 gene inhibitor oligonucleotide 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 2; Page 201; 407pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pavco P, Beigleman L,
Usman N, Wincott FE,
94US-00311486.
94US-00317149.
94US-00316771.
94US-00316771.
94US-0031993.
94US-00337608.
94US-00337608.
94US-00357577.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV37795 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                       95US-00380734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          866 GTTGGAACACTTTC 879
                                                                                                                                                                                                                                                                                                                                                       (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14 Griggadarrirc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 92.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1995-351090/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                               Stinchcomb DT,
                                                                              03-OCT-1994;
07-OCT-1994;
11-OCT-1994;
  23-SEP-1994;
23-SEP-1994;
                                                           28-SEP-1994;
                                                                                                                                                             04-NOV-1994;
                                                                                                                                                                                                                                               16-DEC-1994;
23-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9818812-A1
                                                                                                                                                                                                                   28-NOV-1994
```

97WO-US015397.

29-AUG-1997;

```
An oligomer has been developed which is capable of inhibiting expression of an interleukin gene. The interleukin gene is preferably an interleukin of an interleukin gene. The oligomer can be an oligomucleotide or an oligomucleotide analogue. When it is an oligomucleotide analogue it is coligomucleotide analogue. When it is an oligomucleotide analogue it is selected from protein mucleic acid, morpholino, methylene linkage, boronated, and pteridine oligomucleotide analogues. The analogue is consorted at its 5' end on 3' end to an intercalator. The intercalator is a linked at its 5' end on 3' end to an intercalator. The intercalator is a coligomucleotide made of DNA. The oligomucleotide is a phosphodiester oligomucleotide derivative, respecially a phosphodiester oligomucleotide derivative, especially a phosphodiester oligomucleotide of the present septents a specifically claimed to collgomucleotide of the present invention. The oligomer can be used to alleviate inflammatory polyarthopathy, especially that associated with crewmatoid arthritis. The oligomer can also be used to alleviate colligomer can also be used to alleviate of the present and also be used to alleviate inflammation, especially that associated with chronic asthma
                                                                                                                                                         Oligomer capable of inhibiting expression of an interleukin gene - is used to alleviate inflammatory poly-arthopathy, especially rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    transcription-inhibiting complex; polypurine-polypyrimidine region; inflammatory poly-arthopathy; rheumatoid arthritis; asthma; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene; IL-15; inhibitor; oligomer; expression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 12 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Interleukin-15 gene inhibitor oligonucleotide 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Veerapanane D, Hamanaka S, Nozawa I;
                                                                                         Nozawa I;
                                                                                                                                                                                                                                              Claim 20; Page 8; 19pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (HISM ) HISAMITSU PHARM CO LTD.
                                                 (HISM ) HISAMITSU PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV37791 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97WO-US015397.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96US-00740215.
             96US-00740215.
                                                                                           s,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              831 CICITITICITCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         09-SEP-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Crrrrrrrrrrrrrrr 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 92.9
Matches 13; Conservative
                                                                                             Hamanaka
                                                                                                                             WPI; 1998-272129/24.
                                                                                             Veerapanane D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9818812-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-OCT-1996;
               25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Interleukin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-MAY-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV37791;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV37791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
```

```
An oligomer has been developed which is capable of inhibiting expression of an interleukin gene. The interleukin gene is preferably an interleukin cof an interleukin gene. The oligomer can be an oligomucleotide or an interleukin coligomucleotide analogue. When it is an oligomucleotide analogue it is selected from protein nucleic acid, morpholino, methylene linkage, coronated, and pteridine oligomucleotide analogue is linked at its 5' end or 3' end to an intercalator. The analogue is long psoralen or acridine derivative. The oligomucleotide is a phosphodiester, coligomucleotide derivative. The oligomucleotide is a phosphodiester oligomucleotide derivative, especially a phosphodiester oligomucleotide derivative, especially a phosphodiester oligomucleotide is at least 5 (preferably 5-50) nucleotides, in length. The present sequence represents a specifically claimed oligomucleotide of the present invention. The oligomer can be used to alleviate inflammatory polyarthopathy, especially that associated with rheumatoid arthritis. The oligomer can also be used to alleviate the present can also be used to alleviate interpretations.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      eosinophilic inflammation, especially that associated with chronic asthma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic, antinlammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma;
                                      Oligomer capable of inhibiting expression of an interleukin gene - is used to alleviate inflammatory poly-arthopathy, especially rheumatoid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; Ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Coeshott C, Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Integrin subunit beta 3 substrate sequence SEQ ID NO:5868.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 0 A; 5 C; 0 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jarvis T,
                                                                                                                          Claim 19; Page 8; 19pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US006507.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0079678P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           831 CTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA22642 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-591315/50.
WPI; 1998-272129/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               W09950403-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pavco PA,
                                                                                      arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAA22642;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 395
AAA22642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
```

ö

Gaps

. 0

ö

Pavco PA,

integrin subunit alpha-6, or integrin subunit beta-3 

gene, an integrin alpha Subunit Gara, as integrin albaliate beta spans, as integrin alpha Subunit Gara, as integrin alpha Subunit Gara, or the 2 gene. AAA16775 to and AAA1761 to AAA1762 represent ribozyme sequences for ARNIT, corresponding target sequences, AAA1868 to AAA18385 and AAA19987 to corresponding target sequences, AAA1868 to AAA18385 and AAA19987 to AAA19155 to AAA1922 represent their corresponding target sequences, and AAA1922 to AAA1923 to AAA21501 to AAA21595 represent ribozyme sequences for integrin alpha 6 subunit, and AAA21362 to AAA21500 and AAA21595 to AAA21550 and AAA21368 represent their corresponding target sequences, AAA21596 to AAA21595 to AAA23323 to AAA23343 to AAA22475 and AAA223405 to AAA23343 to AAA23343 to AAA23363 to AAA23362 to AAA23343 to AAA2342 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNY, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, disbetic retinopathy, age related macular degeneration (ARM), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tubercus sclerosis, pooriasis, verruca vulgaris, syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNY, Tie-2, Novel ribozymes for modulating the synthesis, expression and/or stability molecules with RNA The present invention describes enzymatic nucleic acid molecules with RN cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 of an mRNA encoding an angiogenic factors. Claim 54; Page 233; 305pp; English. cleaving

Sequence 17 BP; 0 A; 5 C; 4 G; 0 T; 8 U; 0 Other;

Query Match 4.3%; Score 12.4; DB 1; Length 17; Best Local Similarity 42.9%; Pred. No. 5.1e+02; Matches 6; Conservative 7; Mismatches 1; Indels 821 TTGGCTGTGTCTCT 834 ::|||::|:|:|: UUGGCUUUGUCUCU 16 à

AAA22643 standard; RNA; 17 BP 19-JUN-2000 (first entry) RESULT 396 

Integrin subunit beta 3 substrate sequence SEQ ID NO:5869.

Human; aryl hydrocarbon nuclear transport, ARNT, TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antidinflammatory; antiarthritic; antipsoriatic; ARWD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; necesscalar glaucoma; myopic degeneration; psoriasis; vertuca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss

Homo sapiens

709950403-A2 07-OCT-1999. 99WO-US006507 24-MAR-1999; 98US-0079678P 27-MAR-1998;

(RIBO-) RIBOZYME PHARM INC.

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl clear in integrin subunit betea 3 gene, an integrin subunit page, or a Tie-2 gene. AAA16775 to AAA17167 and AAA1768 to AAA1768 to AAA1575 to AAA19154 to AAA1768 to AAA19185 and AAA1908 to AAA19154 represent ribozyme sequences; AAA19154 represent ribozyme sequences for Tie-2, and AAA1838 to AAA1908 to AAA19150 and AAA19152 represent their corresponding target sequences; AAA19223 to AAA20361 and AAA21695 represent ribozyme sequences for integrin alpha 6 subunit, and AAA20362 to AAA2189 to AAA2169 to AAA21695 represent their corresponding target sequences; AAA21689 to AAA21695 and AAA21695 represent ribozyme sequence for integrin subunit beta 3, and AAA22476 to AAA23362, AAA23343 to Comparable to AAA2169 Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors. Mcswiggen JA; Coeshott C, Claim 54; Page 233; 305pp; English. Jarvis T, Roberts E, WPI; 1999-591315/50.

Sequence 17 BP; 0 A; 4 C; 5 G; 0 T; 8 U; 0 Other; Query Match

integrin subunit alpha-6, or integrin subunit beta-3

. 0

Gaps .; 0

; 0 Score 12.4; DB 1; Length 17; Pred. No. 5.1e+02; 7; Mismatches 1; Indels 4.3%; 821 TIGGCIGIGICICI 834 ::|||::|:|:|: uuggcuuugucucu 15 6; Conservative Local Similarity Matches

à

ö

Gaps

RESULT 397

AAV91267 standard; RNA; 17 BP 18-FEB-1999 AAV91267; AAV91267/c 

Human C-raf target site nucleotide position 2173. (first entry)

Human, c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme; target; substrate; catalyst; modulation; expression; Raf gene; delivery; screening; identification; synthesis; deprotection; purification; cancer; inflammation; psoriasis; non-hadic ascites; infection; genetic drift; restenosis; rheumatoid arthritis; ss.

Homo sapiens

409850530-A2

12-NOV-1998

05-MAY-1998;

98WO-US009249.

97US-0046059P. 97US-0049002P. 09-MAY-1997; 09-JUN-1997; Page 196

12-NOV-1998

```
capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (SDB), comprising in systems where modulation has occurred and/or determining the sequence of at least part of the SDBs in such systems. Nucleic acid molecules with conductease activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to cleave target nucleic acid, particularly for treating systemic diseases caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic ascites and inflection. They may also be used to detect genetic drift and wutations in diseased cells and to determine craf RNA. Specifically NACs with RNA-cleaving activity that modulate expression of the Raf gene, are used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of craf. Introduction of sugar/phosphate modifications intereases stability against nuclease and activity. AAV99922 to AAV93877 represent NACs that can be used in the
                                                                                                                                                                                                                                                                                                                                                        Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               activity. AAV90922 to AAV93877 represent NACs that can be used in method, specifically for modulating the expression of a Raf gene
                                                                                                                                                                                                                                         Burgin A;
                                                                                                                                                                                                             Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Thompson J, Workman CT, Beaudry A, Sweedler D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 17 BP; 6 A; 2 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                    used as antiviral agents and synthons.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 177; Page 151; 259pp; English.
               97US-0056808P.
97US-0061321P.
97US-0061324P.
97US-0064866P.
97US-0051718P.
                                                                                                                    97US-0068212P
                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                      Beigelman L, Mo
J, Workman CT,
                                                                                                                                                                                                                                                                                                             WPI; 1999-009494/01.
                                                                                                                       19-DEC-1997;
                                                                                                                                                                                                                                                                    Thompson J,
                                                02-OCT-1997;
                                                                    02-OCT-1997;
                                                                                             05-NOV-1997
```

Gaps ; 0 4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; iive 0; Mismatches 1; Indels 838 CTTCTCTGAAGACA 851 13; Conservative CITCTCTGAAACA Best Local Similarity 17 Query Match Matches

0

AAV91268 standard; RNA; 17 AAV91268; RESULT 398 AAV91268/C 

BP

(first entry) 18-FEB-1999

Human C-raf target site nucleotide position 2174.

Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme; target; substrate; catalyst; modulation; expression; Raf gene; delivery; screening; identification; synthesis; deprotection; purification; cancer; inflammation; psoriasis; non-hepatic ascites; infection; genetic drift; restenosis; rheumatoid arthritis; ss.

Homo sapiens

WO9850530-A2

```
capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (b) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with endounclease activity and catalytic activity, from the present invention. The are used to modulate gene expression in plant and mammalian cells and to capable to acid, particularly for treating systemic diseases caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic ascites and infection. They may also be used to detect genetic drift and mutations in diseased calls and to determine c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate expression of the Raf gene, are used to treat cancer, restencesis, psoriasis or rheumatoid arthritis, or generally any conditional sociated with the level of c-raf. Introduction of sugar/phosphate modifications increased should a cativity adainst nuclease and cativity. Any09022 to Any031877 represent NACs that can be used in the method, specifically for modulating the expression of a Raf gene
                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis; allele specific ollogonucleotide; ASO; reduced complexity genome; RCG; genomic classification; identification; by fingerprinting; tumour characterisation; hybridisation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                       Bellon L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human genomic SNP allele specific oligonucleotide SEQ ID NO:55.
                                                                                                                                                                                                                                                                                                                               Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                       Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K,
Parry T, Beigelman L, McSwiggen JA, Karpeisky A,
                                                                                                                                                                                                                                                                                                                             Parry T, Beigelman L, Mcswiggen JA, Karpeisky Prompson J, Workman CT, Beaudry A, Sweedler D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 5 A; 3 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            used as antiviral agents and synthons.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 177; Page 151; 259pp; English.
                                                                        97US-0046059P.
97US-0049002P.
97US-0051718P.
97US-006131P.
97US-0061324P.
97US-0061324P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA35998 standard; DNA; 17 BP.
                                        98WO-US009249
                                                                                                                                                                                                                          97US-0068212P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTCTCTGAAGACA 851
                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      crrcrcrcadadca 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-009494/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-JUL-2000
                                        05-MAY-1998;
                                                                                                  09-JUL-1997
                                                                                                                                         22-AUG-1997;
02-OCT-1997;
                                                                                                                                                                                 02-OCT-1997;
05-NOV-1997;
                                                                                                                                                                                                                          19-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA35998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA35998
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
```

```
A michael and beam coverations to a descent of a descent of a descent of a single nucleotide polymorphism (SNP) allele in a genomic sample. The method comprises preparing a reduced complexity genome (RCG) from the genomic sample and analysing the RCG for the presence or absence of a SNP allele. The method can be used to characterise a tumour, to generate a genomic pattern for an individual genome or to generate a genomic classification code for a genome. The method can be used to assess whether a subject is at risk for developing a disease or to identify a set of SNP alleles associated with a disease. The method can also be used to perform linkage analysis. AAA35944 to AAA35947 represent sequences used in the exemplification of the present invention. AAA35948 to
                                                                                                                                                                                                                                                                                    Detection of single nucleotide polymorphisms in genomes by preparation and analysis of reduced complexity genomes, useful for genotyping, fingerprinting and determining allele frequency of SNPs.
                                                                                                                                                                                                                                                                                                                                                                                      A method has been developed for detecting the presence or absence of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead ribozyme; hairpin ribozyme; antisense oligomucleotide; gene expression modification; cancer; phosphorothioate; endonuclease; anticancer; breast cancer; endometrium cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA36632 represent nucleotide sequences containing SNPs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 6 A; 6 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                     (MASI ) MASSACHUSETTS INST TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 55; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 819 GGTTGGCTGTGTT 832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAA25681 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-JUL-2000 (first entry)
                                                                                                                                                                                                                      Landers JE, Jordan B,
                                                                                                                                                                                                                                                    WPI; 2000-293181/25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                 WO200018960-A2
                 Homo sapiens.
                                                                                                                                                   25-SEP-1998;
                                                                                                                  24-SEP-1999;
                                                                                  06-APR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA25681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
```

Charest A;

Housman DE,

99WO-US022283 98US-0101757P

```
with a target sequence and contain at least one phosphoro(di)thioate
link, having endonuclease activity. (A), and more generally any catalytic
link, having endonuclease activity. (A), and more generally any catalytic
contolic acid (A) that modulates expression of the oestrogen receptor.
Contolic acid (A) that modulates expression of the oestrogen receptor.
General care used to treat cancer (particularly of breast or endometrium),
contolic acid (A) that modulates expression of implanting treated cells, or
for other conditions associated with levels of oestrogen receptor.
Because of the high selectivity for targeted RNA, (A) can also be used to
correlate inhibition of gene expression with alterations in phenotype,
controlarly for identification of therapeutic targets, and as research
controlarly for identification of therapeutic targets, and as research
controlarly for identification of modifications in (A) improves
consequence to nucleases, binding affinity and/or activity. AAA23633 to
AAA24748 to AAA2593 represent their corresponding target
consequences, and AAA26105 represent their corresponding target
sequences, and AAA26107 to AAA26211 represent their corresponding target
consequences AAA26219 to AAA26211 represent their corresponding target
consequences AAA26219 to AAA26211 represent their ribozyme
consequences and
conseque
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                            New nucleic acids that interact, and optionally cleave, target sequences,
                                                                                                                                                                                                                                                                                                                                             present invention describes nucleic acids (A) that interact stably
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     antisense oligonucleotides used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:2180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead irbozyme; hairpin ribozyme; antisense oligonucleotide; gene expression modification; cancer; phosphorothicate; endonuclease; anticancer; breast cancer; endometrium cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                            Bellon L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; Live 0; Mismatches 1; Indels
                                                         Karpeisky A,
Haeberli P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 0 A; 4 C; 3 G; 10 T; 0 U; 0 Other;
                                                   Thompson JD, Beigelman L, Mcswiggen JA, 1
Reynolds M, Zwick M, Jarvis T, Woolf T,
Matulic-Adamic J;
                                                                                                                                                                                                                                                                                   Claim 77; Page 87; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA25682 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US008547
(RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                825 CTGTGTCTCTTTC 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 crererrerrer 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-JUL-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13; Conservative
                                                                                                                                                                                                                                             used to treat cancer.
                                                                                                                                                           WPI; 2000-013248/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W09954459-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA25682;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA25682
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

ö

Gaps

·.

1; Indels

4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; tive 0; Mismatches 1; Indels

Conservative

13;

17 GGCTGGCTGTGTCT 4

98US-0082404P. 98US-00103636.

20-APR-1998; 23-JUN-1998; (RIBO-) RIBOZYME PHARM INC.

98US-0082404P. 99WO-US008547

19-APR-1999; 20-APR-1998; 23-JUN-1998;

Homo sapiens WO9954459-A2

```
with a target sequence and contain at least one phosphoro(di)thioate
lik, having endonuclease activity. (A), and more generally any catalytic
link, having endonuclease activity. (A), and more generally any catalytic
mucleic acid (A) that modulates expression of the oestrogen receptor
converse acid (A) that modulates expression of the oestrogen receptor
correlate incomplication cells ex vivo and implanting treated cells, or
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlates inhibition of gene expression with alterations in phenotype,
correlates inhibition of gene expression with alterations in phenotype,
correlates inhibition of gene expression with alterations in phenotype,
correlates inhibition of gene expression with alterations in phenotype,
correlate inhibition of gene expression with alterations in phenotype,
correlates (for RNA, in the same way that restriction endonucleases are
cused with DNA). The combination of modifications in (A) improves
correlate inhibition of expression receptor haltiputy. AAA23633 to
AAA24747 represent oestrogen receptor haltiput in in and AAA26107 to AAA26210 represent their corresponding target
sequences, and AAA26107 to AAA26211 represent their corresponding target
correlates and antisense oligonucleotides used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                             New nucleic acids that interact, and optionally cleave, target sequences,
                                                                                                                                                                                                                                     present invention describes nucleic acids (A) that interact stably
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chorismate synthase; shikimate pathway; plant-like enzyme; malaria; antimalarial; antiparasitic; vaccine; primer; sequencing; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Plasmodium falciparum chorismate synthase sequencing primer PFCS13.
Bellon L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.3%; Score 12.4; DB 1; Length 17; Best Local Similarity 92.9%; Pred. No. 5.1e+02; Matches 13; Conservative 0; Mismatches 1; Indels
Karpeisky A,
Haeberli P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 0 A; 5 C; 3 G; 9 T; 0 U; 0 Other;
Thompson JD, Beigelman L, Mcswiggen JA, Reynolds M, Zwick M, Jarvis T, Woolf T,
                                                                                                                                                                                               Claim 77; Page 87; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA89019 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-APR-2000; 2000WO-US011478.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0132506P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             825 CIGIGICICITITC 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Creferricitric 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ARCH DEV CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Plasmodium falciparum
                                                                                                                                                        used to treat cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ROBERTS C.
JOHNSON J.
KIRISITS M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MRJ TRUST.
MCLEOD R W.
                                                                                     WPI; 2000-013248/01
                                               Matulic-Adamic J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200066154-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-MAY-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-NOV-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nvention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA89019;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MRJM-)
(MCLE/)
(ROBE/)
(ROBE/)
(JOHN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ARCH-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 402
                                                                                                                                                                                                                                           The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA89019,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

```
Sequencing primer PFCS13 is 1 of 14 primers (see AAA89007-A89020) customised for the sequencing of chorismate synthase (CS) cDNA (see AAA88980) of Plasmodium falciparum. Components of plant-like metabolic pathways in P. falciparum, such as shikimate pathway CS, can be used to develop compositions that interfere with its growth and survival. Components include enzymes, transit peptides, and nucleotide sequences encoding the enzymes and peptides, or promoters of these sequences, which antibodies, antisense molecules and other inhibitors are directed biagnostic and therapeutic reagents and vaccines are developed based on the components and their inhibitors. CS nucleic acids may be altered to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                        Vaccinating against Toxoplasma gondii using nucleic acids encoding chorismate synthase (CS) or attenuated parasites lacking the CS gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
                                                                                                                                     Β;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ..
0
                                                                                                                                     Samuel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Holman PS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; Live 0; Mismatches 1; Indels
                                                                                                                        Roberts F, Johnson J, Kirisits M;
Mui E, Haselkorn R, Mack D, Samue
                                                                                                                                                                                                                                                                                                                                                                                                                     produce a knockout organism useful in vaccine production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Booher RN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 8 A; 4 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human Chkl ribozyme substrate SEQ ID NO: 31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mcswiggen J,
                                                                                                                                                                                                                                                   Example 14; Page 98; 250pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-FEB-2001; 2001WO-US003504.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-FEB-2000; 2000US-0179983P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      835
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH94606 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16 rescrerricitri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 92.99
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RNA cleavage; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     822 TGGCTGTGTCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jarvis T,
                                                                                                                         Roberts C,
                                                                                                                                         Lyons R,
Zuther E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FATTAEY A R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-496922/54.
                                                    MACK D.
SAMUEL B.
GORNICKI P.
                                                                                                                                                                                 WPI; 2000-687446/67.
                          MUI E.
HASELKORN R.
FERGUSON D.
LYONS R.
                                                                                                  ZUTHER E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200157206-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Fattaey AR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-AUG-2001.
                                                                                                                                         Ferguson D,
Gornicki P,
                                                                                                                            Mcleod RW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAH94606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (FATT/)
                                                                                  (GORN/)
(ZUTH/)
                                                       (MACK/)
(SAMU/)
                                           (HASE/)
                             (MUIE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAH94606,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

ö

; 0

Gaps

0;

```
The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chkl) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chkl levels, including cancer. The present sequence is an oligonucleotide described in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chkl) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chkl levels, including cancer. The present sequence is an oligonucleotide described in the exemplification of the invention
Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; checkpoint kinase-1; Chkl; antisense; ribozyme; gene therapy;
                                                                                                                                                                                                                                                                              / Match 4.3%; Score 12.4; DB 1; Length 17; Local Similarity 92.9%; Pred. No. 5.1e+02; les 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 4.3%; Score 12.4; DB 1; Length 17; Best Local Similarity 92.9%; Pred. No. 5.1e+02; Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Holman
                                                                                                                                                                                                                                         Sequence 17 BP; 6 A; 2 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Booher RN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 4 A; 1 C; 7 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human Chkl ribozyme substrate SEQ ID NO: 1232.
                                                                                                                                                                                                     the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mcswiggen J,
                                                                        Claim 4; Page 52; 115pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; Page 89; 115pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 02-FEB-2001; 2001WO-US003504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-FEB-2000; 2000US-0179983P.
                                                                                                                                                                                                                                                                                                                                                      CCAGAGAATTTTAC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    807/c
AAH95807 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
(FATT/) FATTAEY A R.
                                                                                                                                                                                                                                                                                                                                                                                         14 CCATAGAATTTTAC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RNA cleavage; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fattaey AR, Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-496922/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200157206-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                      935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH95807;
                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chkl) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chkl levels including cancer. The present sequence is an oligonucleotide described in
                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                     Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                          Holman PS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                         Booher RN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 6 A; 2 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human Chkl ribozyme substrate SEQ ID NO: 976.
                                                                                                                                                               Human Chkl ribozyme substrate SEQ ID NO: 30.
                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 4; Page 52; 115pp; English
                                                                                       ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                    02-FEB-2001; 2001WO-US003504
                                                                                                                                                                                                                                                                                                                           03-FEB-2000; 2000US-0179983P
   812
                                                                                     AAH94605 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                  RIBOZYME PHARM INC.
FATTAEY A R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           935 CCAGAGAATTTTAC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH95551 standard; RNA; 17
                         4
                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
RNA cleavage; cancer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RNA cleavage; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fattaey AR, Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-496922/54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                    WO200157206-A2
                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                       09-OCT-2001
                                                                                                                                                                                                                                                                           09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-OCT-2001
                                                                                                               AAH94605;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAH95551;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15
                                                                                                                                                                                                                                                                                                                                                  (RIBO-)
(FATT/)
                                                            RESULT 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                          AAH94605/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAH95551/
                                                                                       염
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

0;

Homo sapiens

0

Gaps

0;

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABB83999) a sequence having 65% sequence of 6711, (CS1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPsses as well as downstream components of the signal transduction pathway. (I) is useful of identifying a specific binding partner. (I) and mucleic acids (II) for identifying a specific binding partner. (I) and mucleic acids (II) caused by altered expression of human POSHL1 including disease and treating caused by altered expression of human POSHL1 including disease and (II) is useful for measuring and for surveying gene expression and creating cransgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomorbeotide useful in examples of princed specification, but is based on sequence information supplied to browner by the Buropean Patent Office
                                                                                                                                                                Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
Rho GTPase; signal transduction; gene expression; cancer; vaccine;
gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                       Example 2; SEQ ID NO 1113; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human POSHL1 scanning oligonucleotide SEQ ID NO 1119.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; 2001MO-US000663.
; 2001MO-US000664.
; 2001MO-US000665.
; 2001MO-US000665.
; 2001MO-US000667.
; 2001MO-US000668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-JAN-2002; 2002EP-00001165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  744 GIAGGICCCAGGG 757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV90406 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTAGGGGCCCAGGG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13; Conservative
                                                                                                                    WPI; 2002-684061/74
(AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EP1239051-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-SEP-2002
                                                           Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV90406;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABV90406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RANGE STATE OF STATE 
      a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chkl) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chkl levels, including cancer. The present sequence is an oligonucleotide described in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                      Holman PS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human POSHL1 scanning oligonucleotide SEQ ID NO 1113.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 6 A; 1 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                      Booher RN,
                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 4; Page 77; 115pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001WO-US000666.
2001WO-US000667.
2001WO-US000669.
2001WO-US000670.
2001WO-US000670.
2001US-0084761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABV90400 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001WO-US000665
                                                                                                                                                                                                                     03-FEB-2000; 2000US-0179983P
                                                                                                                                                                02-FEB-2001; 2001WO-US003504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       935 CCAGAGAATTTTAC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                 RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 CCATAGAATTTTAC 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 92.9
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                            Jarvis T,
                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHZ
(FATT/) FATTAEY A R.
                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-496922/54.
                                        WO200157206-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAY-2001;
10-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                            Fattaey AR,
                                                                                                    09-AUG-2001
```

ABV90400;

Rho

RESULT 407

ABV90400

Query Match

Matches

à P

0;

Gaps

.; 0

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, MBB3939), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful cor intentifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnosing and creating causer, they useful in the development of vaccines and (II) is useful for measuring and for surveying gene expression and creating causer. Lin gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating cransgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the harmone we the present sequence is based on sequence information supplied to harmone the present page.
                                                                                                                                                                             Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Inoko H, Kagiya T, Ichihara T, Matsumura Y, Moriya S, Nishida M;
                                                                                                                                                                                                                                                               Example 2; SEQ ID NO 1119; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; human leukocyte antigen; HLA; genotype; polymorphism;
immunogenetic; transplantation; genetic disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; cive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human HLA genotyping oligonucleotide SEQ ID NO 988.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 2 A; 5 C; 9 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .,0
23-MAY-2001; 2001US-00864761.
10-OCT-2001; 2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUN-2001; 2001WO-JP004662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUN-2000; 2000JP-00164798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    747 GGGTCCCAGGGTCC 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GGGGCCCAGGGTCC 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABL31499 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (NISN ) NISSHINBO IND INC. (SYST-) SYSTEM RES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                         WPI; 2002-684061/74.
                                                         (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200192572-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-DEC-2001
                                                                                                     Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABL31499;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABL31499
  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
```

ABT36272 standard; DNA; 17 BP.

ABT36272;

12-JUN-2003 (first entry)

ö

Gaps

·,

```
.
0
                                                                                                                                                                                          The invention relates to a typing kit for judging human leukocyte antigen (HLA) genotype of a sample by hybridising a substrate on which 10-24 base oligonucleorides (ABL30512-ABL31809) originating in the sequences of genes e.g. belonging to HLA class I antigens on human genome and containing gene polymorphisms as alloantigens have been immobilised as primars for amplification of cleaved nucleic acids relating to gene polymorphisms. The method is useful for judging HLA genotypes of individuals by determining immunogenetic differences before transplanting between them, providing genetic information to decide compatibility of between them, providing genetic information of bone marrow, kidney, liver, pancreas, Langerhans islet in pancreas and cornea, susceptibility diagnosis of genetic diseases and identifying individuals
                                                             Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of individuals e.g. by determining immunogenetic differences when transplanting between them.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 5 A; 7 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                      Claim 10; Page 280; 345pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     929 CACCCTCCAGAGAA 942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4 caccerceasassa 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13; Conservative
                  WPI; 2002-122074/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 410
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABT36272
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             q
```

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds. The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells. Tumour suppression related human fukutin oligo SEQ ID No 1909, Disclosure; Page 256; 720pp; French. Tuijnder M; (MOLE-) MOLECULAR ENGINES LAB 17-SEP-2002; 2002WO-IB004208. 17-SEP-2001; 2001FR-00011978. relerman A, Amson R, WPI; 2003-313353/30. WO2003025175-A2 Homo sapiens 27-MAR-2003. 

```
alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as [anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, component of a gene chip, in vitro as [anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of paramaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and cashing the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these chipsprides and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression characted human fukutin oligonucleotide of the invention
```

```
4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02;
                                                              1; Indels
Sequence 17 BP; 7 A; 4 C; 3 G; 3 T; 0 U; 0 Other;
                                                              0; Mismatches
                                                                                               930 ACCCTCCAGAGAAT 943
                          Query Match
Best Local Similarity 92.9'
                                                                                                   ò
```

o;

Gaps

. 0

Tumour suppression related human fukutin oligo SEQ ID No 2520. ABT36883 standard; DNA; 17 BP ATCCTCCAGAGAAT 15 12-JUN-2003 (first entry) 7 ABT36883; RESULT 411 ABT36883 g

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin;

Homo sapiens

WO2003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M;

WPI; 2003-313353/30.

relerman A, Amson R,

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 327; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement

```
of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the rector or antibodies discerted against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzhaimer's disease and contained and antibodies and/or prognosis of these diseases. The polypeptides can also be useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression or related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gencitabine; radiation therapy; inflammatory disease; asthma; diabetes; rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion injury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; prostate cancer; colorectal cancer; brand cancer; osoppageal cancer; stomach cancer; bladder cancer; pancreatic cancer; lymphome; alloma; multidrug resistant cancer; melanoma; lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                         Score 12.4; DB 1; Length 17;
Pred. No. 5.1e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 4 A; 2 C; 3 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NFKB sub-unit modulating zinzyme substrate #260.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Draper KG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92US-00987132.
94US-00245466.
94US-00291932.
96US-00777916.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACA07861 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAY-2001; 2001US-00864785.
                                                                                                                                                                                                                                                                                                                                                                                                                 4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                954 AAGAGCCAAATTGA 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-JUN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 AAGAACCAAATTGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                        13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (STIN/) STINCHCOMB D T. (MCSW/) MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MCSW/) MCSWIGGEN J. (DRAP/) DRAPER K G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-340953/32.
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2002177568-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-DEC-1992;
18-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-NOV-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACA07861;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACA07861,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
```

Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.

Claim 3; Page 41; 72pp; English.

The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor regulates expression of a sequence encoding a subunit of nuclear factor cand as (IV) is an inozyme, fallowe, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patatent having a condition associated with the level of REL-A. (C I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially MG-2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, corrical, head and neck, ovarian cancer, melanoma, lymphoma, glicoma or cervical, head and neck, ovarian cancer, melanoma, lymphoma, glicoma or cervical, head and neck, ovarian cancer, melanoma, lymphoma, glicoma or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, gementable or radiation therapy. The enzymatic and misense nucleic acid molecules are also useful for treating inflammatory disease such as recensive and molecules are also useful for treating inflammatory disease such as rejection, gene therapy applications, isoher solvesity, autoimmune disease, lupus, multiple solvenis, transplant/graft rejection, gene therapy applications, isohematory bowel disease or rejection. This sennence represents the substrate of a novel enzymatic sequence represents the substrate of a novel enzymatic nucleic acid molecule

Sequence 17 BP; 1 A; 5 C; 7 G; 0 T; 4 U; 0 Other;

Gaps .; 0 4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; ative 0; Mismatches 1; Indels Conservative Best Local Similarity Matches 13; Conserv Query Match

. 0

777 GAGGCAGCCCCTC 790 14 GAAGGCAGCCCCTC 1 ò

ACA06818 standard, RNA; 17 BP.

RESULT 413 ACA06818, ACA06818;

03-JUN-2003 (first entry)

NFKB sub-unit modulating inozyme substrate #637.

Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; postate cancer; colorectal cancer; brain cancer; costate cancer; brain cancer; cervical cancer; stomach cancer; bladder cancer; pancreatic cancer; cervical cancer; head and neck cancer; ovarian cancer; melanoma; cervical cancer; head and neck cancer; ovarian cancer; melanoma; chemotherapy; gloma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate; gencitabine; radiation therapy; inflammatory disease; asthma; diabetes; rheumatorid arthritis; restenosis; crohn's disease; obesity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion injury; glomerubonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss.

Homo sapiens

JS2002177568-A1

28-NOV-2002 

23-MAY-2001; 2001US-00864785.

94US-00245466. 94US-00291932. 96US-00777916. 92US-00987132. 07-DEC-1992; 18-MAY-1994; .5-AUG-1994; 

(STIN/) STINCHCOMB D MCSWIGGEN J.

23-DEC-1996;

(DRAP/) DRAPER K G.

Mcswiggen J,

Stinchcomb DT,

Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases. WPI; 2003-340953/32.

Claim 3; Page 36; 72pp; English.

The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor regulates expression of a sequence encoding a subunit of nuclear factor. CC regulates B (NEKB), where (I) is an inozyme, g-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. CC (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially Mg^2Z+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, cc antisense nucleic acid molecules are useful for treating breast, lung, cc antisense nucleic acid molecules. REL-A specific inhibitors or multidrug resistant cancer. The method involves use of other drug cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or multidrug resistant cancer. The method involves use of other drug therpaps including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, fluorouxacil carboplatin, edarrexate, cyclophosphamide, doxorubin, fluorouxacil carboplatin, edarrexate, cyclophosphamide, so useful for treating inflammatory disease such as acid molecules are also useful for treating inflammatory disease such as rhumartorid arrhuring restrance. rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury (central nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence represents the substrate of a novel enzymatic nucleic acid molecule

Sequence 17 BP; 1 A; 5 C; 6 G; 0 T; 5 U; 0 Other;

.; 0 4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; ative 0; Mismatches 1; Indels Local Similarity 92.9 des 13; Conservative Query Match Matches

Gaps

g

ACA07860 standard; RNA; 17 ACA07860; RESULT 414 ACA07860,

BP

(first entry) 03-JUN-2003 

NFKB sub-unit modulating zinzyme substrate #259.

Enzymatic nucleic acid, nuclear factor kappa B; NFKB; inozyme; zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; prostate cancer; colorectal cancer; brain cancer; oesophageal cancer; stomach cancer; badder cancer; pancreatic cancer; cervical cancer; had and neck cancer; ovarian cancer; melanoma; lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor;

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;

schizophrenia; ss.

WO2003025176-A2. Mus musculus.

27-MAR-2003

Murine oligonucleotide associated with tumour supression, SEQ ID 3448.

(first entry)

01-JUL-2003

ACC66201;

BP.

ACC66201 standard; DNA; 17

```
The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFKB), where (I) is an inozyme, Zinzyme, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially MG^2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stomach, bladder, panoreatic, cervical, head and neck, ovarian cancer, melanoma, lymphona, glioma or multidrug resistant cancer. The method involves use of other drug therapies such as monoclonal antibodies, REL-A specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, color arbitic are useful for treating inflammatory disease such as acid molecules are also useful for treating inflammatory disease such as channal or radiation therapy. The enzymatic and antisense nucleic acid molecules are also useful for treating inflammatory disease such as channal or radiation therapy. The enzymatic and antisense nucleic acid molecules are also useful for treating inflammatory disease such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury (central nervous system (CNS) and myocarchail), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence represents the substrate of a novel enzymatic
                cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, gemcitabine, radiation therapy; inflammatory disease, asthma; diabetes; rheumatoid arthritis; restenosis; Crohn's disease, obesity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion injury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss.
chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 1 A; 4 C; 6 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Draper KG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 3; Page 41; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                          92US-00987132.
94US-00245466.
94US-00291932.
96US-00777916.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stinchcomb DT, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                             23-MAY-2001; 2001US-00864785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STINCHCOMB D T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-340953/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DRAPER K G.
                                                                                                                                                                                                                                                         US2002177568-A1
                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                     18-MAY-1994;
15-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                37-DEC-1992;
                                                                                                                                                                                                                                                                                                            28-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DRAP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (/NIIS)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MCSM/)
```

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies

and transfected cells.

Ξ

Tuijnder

Amson R,

Telerman A,

WPI; 2003-333167/31.

(MOLE-) MOLECULAR ENGINES LAB.

17-SEP-2002; 2002WO-IB004210. 17-SEP-2001; 2001FR-00011979

```
The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaccuticals for prevention and/or treatment of viral diseases that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.3%; Score 12.4; DB 1; Length 17; 12.9%; Pred. No. 5.1e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            lumour suppression/reversion associated nucleotide #832.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          development of tumours or cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 434; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        92.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADB40509 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAAGTCCCAGGAGA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               708 CGAGTCCCAGGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              characterised by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB40509;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADB40509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        윤
```

·,

RESULT 415 ACC66201/c

. 0

Gaps

.; 0

4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; tive 0; Mismatches 1; Indels

Š a

Query Match Best Local Similarity 92.9 Matches 13; Conservative

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleotides in vitro sense and antisense sequences, of nucleotides involved in tumour consense and antisense sequences, of nucleotides involved in tumour consuppression or reversion, apoptosis and or viral resistance, to produce experimental models. The nucleotides (also vectors containing them and calls containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or call degeneration (e.g. Alzheimer's disease or schizophrenia).
                                                                                                                                                                                                                                                                                                                                       New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 129; 771pp; French.
                                                                                                                                                                                                           (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              expression of the nucleotides.
                                                                                                                       17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                   17-SEP-2001; 2001FR-00011981
                                                                                                                                                                                                                                                   Telerman A, Amson R,
                                                                                                                                                                                                                                                                                               WPI; 2003-441574/41.
                                       WO2003040369-A2
  Homo sapiens.
```

4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; ive 0; Mismatches 1; Indels Sequence 17 BP; 5 A; 7 C; 3 G; 2 T; 0 U; 0 Other; 92.98; 921 ATCACCACCACCT 934 2 Archecaccancer 15 Local Similarity 92.9 Query Match Matches à q

ADB43046 standard; DNA; 17 BP. (revised) L8-DEC-2003 04-DEC-2003 ADB43046; RESULT 417 ADB43046 

Tumour suppression/reversion associated nucleotide #3369.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens

WO2003040369-A2

```
17-SEP-2002; 2002WO-IB004219.
15-MAY-2003
```

17-SEP-2001; 2001FR-00011981.

(MOLE-) MOLECULAR ENGINES LAB

Tuijnder M; Telerman A, Amson R,

WPI; 2003-441574/41.

Tuijnder M;

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 425; 771pp; French.

fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, dentifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour complement polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and complemental models. The nucleotides (also vectors containing the vectors), the encoded polypeptides and antibodies of viral infections or diseases characterized by development of tumours or viral infections or diseases characterized by development of tumours or viral infections or diseases characterized by development of tumours and/or prognosis of these diseases. The nucleotides can be used for diagnosis also be used to screen for their specific interactive molecules, expression of the nucleotides and polypeptides can be used to screen for their specific interactive molecules. expression of the nucleotides.

Seguence 17 BP; 5 A; 2 C; 2 G; 8 T; 0 U; 0 Other;

0; / Match 4.3%; Score 12.4; DB 1; Length 17; Local Similarity 92.9%; Pred. No. 5.1e+02; les 13; Conservative 0; Mismatches 1; Indels Query Match Matches

·:

Gaps

임 à

ö

Gaps

; 0

ADB41697 standard, DNA; 17 BP (first entry) (revised) 04-DEC-2003 18-DEC-2003 ADB41697; RESULT 418 ADB41697 

Tumour suppression/reversion associated nucleotide #2020.

cytostatic, antiviral, neuroprotective, nootropic, neuroleptic; ss; primer, probe, tumour suppression, tumour reversion, apoptosis, virus resistance, transgenic animals, Alzheimer's disease, schizophrenia, diagnosis.

Homo sapiens

WO2003040369-A2.

15-MAY-2003.

```
AAV51705-V52008 are reverse PCR primers used to amplify fragments of the Zea mays genome in order to detect polymorphic markers. Such markers can be used in the construction of allele-specific primers and probes for amplification or hybridisation, e.g. to determine common or disparate ancestry between 2 or more plants, to monitor the genetic contribution of an ancestral plant, to trace the progeny of proprietary plants, in certification of a hybrid plant or to identify the progeny of a back-crossed plant with an ancestral plant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A method has been developed of defining a set of compounds that modulate
                                                                                                                                           Brassica species allele-specific oligonucleotide probes and primers useful for plant breeding.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human RhoC phosphorothioate antisense oligonucleotide SEQ ID NO:154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Identifying compounds which modulate expression of nucleic acids, provide compounds having defined physical, chemical or bioactive properties, e.g. antisense activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Identification; genetic target; gene modulation; human; probe; antisense oligomuclectide; phosphorothicate; PCR primer; nucleotide sequence-based technology; antisense drug discovery; target validation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.3%; Score 12.4; DB 1; Length 18; 92.9%; Pred. No. 5.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sasmor HM,
                                                             Ä;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 4 A; 3 C; 8 G; 3 T; 0 U; 0 Other;
                                                           Sapolsky RJ, Murigneux
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Freier SM,
Vickers TA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 18; Page 97; 264pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Baker BF, Mcneil J,
tt JR, Borchers AH,
                                                                                                                                                                                                                Example 1; Page 55; 65pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0081483P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US008268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           919 TCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAZ41002 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    retreaceaceae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                  (AFFY-) AFFYMETRIX INC.
                                                             Landry BS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          . LM, Banc.
Wyatt JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1999-620446/53
                                                                                                      WPI; 1998-333252/29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9953101-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13-APR-1998;
28-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-OCT-1999.
                                                             Lemieux B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cowsert LN
Ohasi C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ41002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ41002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                         The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the concleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, cleentifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour compensation or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, the nucleotide can be used for the nucleotides and polypeptides can be used to screen for their specific interactive molecules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Polymorphic marker; allele-specific; probe; amplification; PCR primer; hybridisation; plant; hybrid certification; genetic contribution; progeny; back-cross; hybrid; ancestry; corn; ss.
                                                                                                                                                                                                                    New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.3%; Score 12.4; DB 1; Length 17; 92.9%; Pred. No. 5.1e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 3 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zea mays genome reverse PCR primer #303.
                                                                                                                                                                                                                                                                                                           Disclosure; Page 268; 771pp; French.
                                                                                                                                  Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           expression of the nucleotides.
                                                                                         (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96US-0032069P.
97US-00813507.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97WO-US021782
  17-SEP-2002; 2002WO-IB004219.
                                                17-SEP-2001; 2001FR-00011981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ilarity 92.9%;
Conservative
                                                                                                                                                                                                                                             useful e.g. for treatment of
polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     976 ATCTGGTGTATGGG 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAV52007 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Arcrecrerariese 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                    Amson R,
                                                                                                                                                                             WPI; 2003-441574/41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
ses 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9824796-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     11-JUN-1998
                                                                                                                                      Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zea mays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV52007;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV52007/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
```

à a used to

Brooks

0

Gaps

ö

```
8888888888888888888888888888888888
```

Compounds with the LNA sequence. The method comprises generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual compounds with the tNA according to defined criteria. Also described are: (1) a method of defining a set of oligonucleotides (ONS) that modulate the expression of defining a set of oligonucleotides (ONS) that modulate the expression of comparating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual ONS with the tNA sequence comprising generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual ONS with the tNA according to defined criteria, and (2) a method of defining a set of the compounds that modulate the expression of a method of defining of the compounds with the tNA. The methods can be used for the generation of the compounds with the tNA. The methods can be used for the generation chemical or bioactive properties. Information gathered from assays of such compounds is used to identify nucleic acid sequences that are antisense drug discovery and target validation. AAZ40852 to AAZ41220, and AAX52701 to AAX54701 the expression of a target nucleic acid (tNA) sequence via binding of the

Sequence 18 BP; 4 A; 5 C; 4 G; 5 T; 0 U; 0 Other;

Length 18; 1; Indels Score 12.4; DB 1; Pred. No. 5.4e+02; 0; Mismatches 1; 4.3%; 872 ACACTTTCCTGAGA 885 3 ACACTTTCCTGTGA 16 13; Conservative Best Local Similarity Query Match Matches δ

421

AAA58687 standard; RNA; 18 AAA58687; AAA58687, 

20-OCT-2000 (first entry)

Nucleotide sequence of the N18 domain of a miniribozyme.

Miniribozyme; viral disease; herpes simplex virus; AIDS; inflammatory disease; arthritis; circulatory disorder; atherosclerosis; restenosiasis; psoriasis; cervical preneplasia; papilloma disease; bacterial infection; prokaryotic infection; neoplastic condition; chronic myeloid leukemia; anti-viral; anti-fungal; anti-bacterial; anti-protozoan; anthelminthic; herbicide; pesticide; ss.

Synthetic.

WO200039146-A1.

06-JUL-2000.

99WO-AU001162. 24-DEC-1999; 98AU-00007951 24-DEC-1998; (CSIR ) COMMONWEALTH SCI & IND RES ORG.

Lockett TJ; Hendry P, JF, Conaty

WPI; 2000-465731/40.

Miniribozyme compounds useful for cleaving a target mRNA in a host cell, e.g. for treating AIDS, arthritis, atherosclerosis, restenosis, bacterial and prokaryotic infection. The specification describes miniribozyme compounds. The minirobozymes, Example; Fig 4; 81pp; English.

oligonuclectide transfer vectors containing a nucleotide sequence encoding the miniribozyme, are useful for cleaving a target mRNA in a

restenosis, psoriasis, cerrical preneplasia, papilloma disease, bacterial and prokaryotic infection, neoplastic conditions associated with production of aberrant RNAs such as in chronic myeloid leukemia. The minitabozymes may be combined with pharmaceutically or veterinarally acceptable carriers or may be supplemented in a composition with one or more anti-viral, anti-fungal, anti-bacterial, anti-parasitic, and protozoan or anthelminthic agents, herbicides or pesticides. AAA56685-ASB61 represent sequences of the N18 domain of miniribozymes of the host cell. They are especially used for treating viral diseases caused by herpes simplex virus or AIDS and other inflammatory diseases such as arthritis and circulatory disorders such as atherosclerosis and 8

Sequence 18 BP; 8 A; 3 C; 3 G; 0 T; 4 U; 0 Other;

Gaps . Length 18; 1; Indels Score 12.4; DB 1; Pred. No. 5.4e+02; 0; Mismatches 1; 4.3%; 13; Conservative Local Similarity Query Match Matches

. 0

911 TCAGATTATCATCA 924 15 TCAGTTTATCATCA

à d

ö

Gaps

0;

AAF79676 standard; DNA; 18 BP AAF79676/

(first entry) 29-MAY-2001 

Human Akt-3 antisense oligonucleotide, SEQ ID NO: 84.

Human; Akt-3; protein kinase; cytostatic; antiinflammatory; infection; antisense therapy; inflammation; tumour; ss.

Homo sapiens.

US6187586-B1

13-FEB-2001.

99US-00474922. 29-DEC-1999;

99US-00474922. 29-DEC-1999;

(ISIS-) ISIS PHARM INC

Roth RA; Cowsert LM, Monia BP,

WPI; 2001-264979/27.

New antisense compounds targeting nucleic acids encoding human Akt-3 useful for treating a disease or condition associated with Akt-3 expression, or in preventing or delaying inflammation or tumor formation.

Claim 1; Col 40; 37pp; English.

The present sequence is one of a number of antisense compounds of up to 30 nucleobases in length targeted to a nucleic acid encoding human Akt-3. The antisense compounds are useful for inhibiting the expression of human Akt-3 in human cells or tissues. They are also useful for modulating the expression of Akt-3, and for treating a human or an animal suspected of having, or being prone to, a disease or condition associated with Akt-3 expression. The antisense compounds may also be used as research reagents, in kits and in diagnostics, e.g. to elucidate the function of a particular gene or to distinguish between functions of various members of a biological pathway; and as a prophylactic, e.g. to prevent or delay Infection, inflammation or tumour formation

Sequence 18 BP; 8 A; 4 C; 3 G; 3 T; 0 U; 0 Other;

or

analgesić; nootropić; cytostatić; neuroleptić; virucide; anticonvulsant; deficiency disease; Mernicke's disease; neurodegenerative disease; pain; nutritional polyvneuropathy; neurological disorder; cancer; gene therapy; Huntington's disease; Alzheiner's disease; Parkinson's disease; epilepsy; demyelinating disease; multiple sclerosis; amyotrophic lateral sclerosis; psychosis; therapeutic; RT-PCR primer; ss.

mp97 protein; scialoglycoprotein; neuroprotective; antibacterial;

Mouse p97 (mp97) cDNA cloning RT-PCR primer, mMTf-10.

(first entry)

01-NOV-2001

AAD14489;

BP.

AAD14489 standard; DNA; 18

```
This invention relates to an antisense compound targeted to a nucleic acid molecule encoding a member of the human Rho family of small GTP binding proteins, where the artisense compound inhibits the expression of the member of the human Rho family. The invention includes antisense oligonucleotides AAF94580 - AAF94680 - AAF94681 which target a RhoA nucleotide sequence, AAF94645 - AAF94684 which target a RhoC nucleotide sequence, AAF94750 which target RhoG nucleotide sequence, AAF94760 which target RhoG nucleotide sequence, AAF94769 - AAF94790 which target a Rac 1 nucleotide sequence and AAF94795 - AAF94699 which target
                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cdc42 mucleotide sequence. The antisense compound is useful for treating hyperproliferative conditions, especially cancer, abnormal wound healing or clotting conditions and ischaemia/reperfusion or reoxygenation injury.
                                                                                                                                                                                                                                                                                                                                     Rho; GTP binding protein; phosphorothioate antisense oligonucleotide; RhoA; RhoB; RhoC; RhoG; Rac 1; cdc42; hyperproliferative condition; cancer; wound healing; clotting; ischaemia; reperfusion; reoxygenation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 An antisense compound targeted to a nucleic acid molecule encoding a member of the human Rho family of small GTP binding proteins useful for
                                    Gaps
                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The compound may also be used to diagnose the above conditions
                                                                                                                                                                                                                                                                                                       Rho C antisense phosphorothicate oligonucleotide SEQ ID 147.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 18;
Score 12.4; DB 1; Length 18;
Pred. No. 5.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 4 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 12.4; DB 1;
Pred. No. 5.4e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 16; Page 73; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      e.g. cancer and ischemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-00387341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-AUG-2000; 2000WO-US022808.
 4.3%;
                                                                         835 TITCTICICIGAAG 848
                                                                                                                                                                                                    AAF94723 standard; DNA; 18
                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 92.9
Matches 13; Conservative
                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cowsert LM;
                                                                                                       rrrcrrcrcregad
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-191677/19.
   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200115739-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                      13;
                                                                                                                                                                                                                                                                        23-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      08-MAR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Roberts ML,
                                                                                                                                                                                                                                     AAF94723;
                                                                                                           16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          treating
                                                                                                                                                                RESULT 423
                                        Matches
                                                                                                                                                                                                                                       ò
```

Jefferies WA;

Cheng N, Gagnier L,

(UYBR-) UNIV BRITISH COLUMBIA.

08-FEB-2001; 2001WO-CA000133. 08-FEB-2000; 2000US-0181091P.

WO200159459-A2. 16-AUG-2001.

Mus sp.

```
The invention relates to mouse p97 protein, mp97 (a scialoglycoprotein)

and its corresponding cDNA molecule. Mouse p97 protein and its DNA
and its corresponding cDNA molecule. Mouse p97 protein and its DNA
cc ancievale are useful for identifying compounds that affects mp97 protein

activity or expression. The invention are useful for treating neurological
conditions, such as cancer, neurodegenerative diseases (e.g., Alzheimer's

cd iseases. Parkinson's disease, Huntington's disease), demyelinating

diseases, parkinson's disease, Huntington's disease), demyelinating

cd iseases, muritional polyneuropathy, psychosis, pain and

conductions, multiple sclerosis), amyotrophic lateral sclerosis,

bacterial and viral infections, deficiency disease. Mouse p97 DNA's

conclusional disorders, especially Alzheimer's disease. Mouse p97 DNA's

conclusional disorders and antisense oligonucleotides, the preparation

conclusional systems to study mp97, and in diagnostic and therapeutic

capplications. Transgenic p97 mice is useful for identifying essential

conganism and for testing potential therapeutic and diagnostic agents that

conganism and for testing potential therapeutic and diagnostic agents that

conganism and for testing potential therapeutic and diagnostic agents that

conganism and for testing potential therapeutic and diagnostic agents that

conganism and for testing potential therapeutic and diagnostic agents that

conganism and for testing potential therapeutic and diagnostic agents

conganism and for testing potential therapeutic and diagnostic agents

conganism and for testing potential therapeutic and diagnostic agents

conganism and for testing potential therapeutic and diagnostic agents

confanism and for testing potential therapeutic and diagnostic agents

confanism and protein the present D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              οĘ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel murine p97 polypeptides and polynucleotides for preparing experimental models to study murine p97 and to identify modulators murine p97 expression or activity useful for treating neurological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 12.4; DB 1; Length 18; Pred. No. 5.4e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 5 A; 4 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 46; 70pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840 TCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 TCTCTGAAGACCGC 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-514683/56.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                conditions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
```

ö

Gaps

0;

Indels

0,

872 ACACTITCCIGAGA 885

δ

3 ACACTTTCCTGTGA 16

AAD14489/c RESULT 424

AAH47423;

RESULT 425 AAH47423/c

Bihain

```
The invention relates to a set of novel map-related biallelic markers, chromosoms 3, 10 and 19. The markers are useful for genotyping or estimating the frequency of an allele in a population, for detecting an association between a genotype or haplotype and a phenotype, e.g. a disease involving drug responses, obesity or disorders related to obesity, such as hyperturicaemia, digestive pathology, hepatic function disorders, cancer, cardiovascular disease, hypertension, hyperlipidaemia, insulin disorders, atheromatous disease and cardiac insufficiency. The markers are useful for detecting a statistical correlation between a biallelic marker haplotype and/or between a biallelic marker haplotype and a phenotype. This sequence represents a PCR primer used to
                                                                                                                                                                                                                                    Set of novel map-related biallelic markers, preferably located on obesity disorder-associated chromosomal regions on chromosomes 3, 10 and 19, useful, for e.g. detecting statistical correlations between marker allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 12.4; DB 1; Length 18;
Pred. No. 5.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                             Chumakov I, Abderrahim H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amplify a human obesity-associated biallelic marker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human chromosome 1p36-35 PCR primer SEQ ID NO:474.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 8 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                       Example 2; Page 287; 311pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                     28-JUN-2001; 2001WO-IB001477
                                                                            18-JUL-2000; 2000US-0219704P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-MAR-2001; 2001JP-00068285.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-MAR-2000; 2000JP-00066716.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   825 CTGTGTCTTTTC 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABL43430 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIKA) RIKAGAKU KENKYUSHO.
(GENO-) GENOTEX YG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                         Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 crererererinae
                                                                                                                                                                                                   WPI; 2002-155043/20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                  and a phenotype
                                                                                                                    (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JP2001321190-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-NOV-2001
                                                                                                                                                         Cohen D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABL43430;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 427
ABL43430/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                one
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human; obesity associated-biallelic marker; chromosome 10; obesity; ss; drug response; hyperuricaemia; digestive pathology; hypertension; cancer; hepatic function disorder; cardiovascular disease; hyperlipidaemia; PCR; insulin disorder; atheromatous disease; cardiac insufficiency; primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a method for determining whether an individual is likely to be susceptible to malignant melanoma, and determining the genetic basis for the melanoma in an individual. The method involves screening the genome of the individual for the presence or absence of or or more polymorphic variants of the XRCC3 gene. Sequences AAH47421-423 represent PCR primers used in a genotyping assay of a candidate DNA repair gene ERCC1 (at position 19007 in exon 4)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Determining the susceptibility of an individual to malignant melanoma, involves screening the genome of the individual for the presence or absence of one or more polymorphic variants of the XRCC3 gene.
                                                                                                                                                                                    XRCC3; XPF; melanoma; genotyping; DNA repair gene; ERCC1; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human obesity-associated biallelic marker downstream PCR primer #121.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.3%; Score 12.4; DB 1; Length 18; 32.9%; Pred. No. 5.4e+02; Ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 3 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Welsh
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wojnarowska F,
                                                                                                                                               ERRC1 gene exon 4 amplifying primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example, Page 14; 35pp; English.
                          AAH47423 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                    22-FEB-2001; 2001WO-GB000753.
                                                                                                                                                                                                                                                                                                                                                                                                            22-FEB-2000; 2000GB-00004193.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS INNOVATION LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         746 AGGGTCCCAGGGTC 759
                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABK41215 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16. Accercececie 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Haldar N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-557711/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                           polymorphism; ss.
                                                                                                                                                                                                                                                                                     WO200162964-A2
                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                         30-NOV-2001
                                                                                                                                                                                                                                                                                                                               30-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Winsey S,
```

. 0

Gaps

. 0

Arraying genome clones.

WPI; 2002-144136/19.

WO200206525-A2.

Homo sapiens

ABK41215

RESULT 426

ò dd

```
The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker sequence is added to the mixture to carry out an amplification reaction; (c) a signal corresponding to the marker is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the maximum in the specified discrimination Nos. succeed to the maximum in the specified discrimination Nos. to array the multiwell plates; (e) the clones in the multiwell plates of the specified discrimination Nos. care mixed respectively in each wells of longitudinal and lateral directions; (f) the mixed clones are cultured and the resultant cultures are amplified by using the above primer; (g) signals are detected from the amplified products; (h) the clones are constituted as the positions on the chromosome and arrayed. The crones are mirrayed from the detected result; and (i) the clones are pecositiuted as the positions on the chromosome and arrayed. The cromes are present PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 BP; 4 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
Claim 4; Page 14; 528pp; Japanese.
```

```
Gaps
                                              ·
0
Query Match

4.3%; Score 12.4; DB 1; Length 18;
Best Local Similarity 92.9%; Pred. No. 5.4e+02;
Matches 13; Conservative 0; Mismatches 1; Indels
                                                                                          746 AGGGTCCCAGGGTC 759
                                                                                                                                16 AGGGTCCAAGGGTC 3
                                                                                              Š
                                                                                                                                    g
```

```
Human SNCG sequencing primer, SEQ ID 64.
     ADE43459 standard; DNA; 18 BP.
                  29-JAN-2004 (first entry)
            ADE43459;
RESULT 428
   ADE43459,
```

Neurodegenerative disease; uPA; SNCG; IDE; KNSL1; LIPA; TNFRSF6; Alzheimer's disease; neuroprotective; nootropic; gene therapy; Chromosome 10; PCR; primer; ss.

Homo sapiens.

WO2003054143-A2. 03-JUL-2003 25-OCT-2002; 2002WO-US034679. 2001US-0339525P. 25-OCT-2001;

; 2001US-0336929P. ; 2001US-0338010P. ; 2001US-0338363P. ; 2001US-0337052P. 28-MAR-2002; 2002US-0368919P 08-NOV-2001; 09-NOV-2001; 04-DEC-2001;

(NEUR-) NEUROGENETICS INC. (GEHO ) GEN HOSPITAL CORP.

Bertram L; Tanzi RE, Wang X, Ta Elliott KJ, Sampson AJ, Velicelebi G, Mullin KM, Saunders AJ, Becker KD,

WPI; 2003-559131/52

Determining a predisposition for or the occurrence of neurodegenerative disease, e.g. Alzheimer's disease by detecting in a target nucleic acid the presence or absence of an allelic variant of one or more polymorphic regions

Example 2; Page 267; 848pp; English.

The present invention relates to a method (M1) for determining a predisposition for or the occurrence of neurodegenerative disease in a subject. The method comprises detecting in a target nucleic acid obtained from the subject the presence or absence of an allelic variant of one or more polymorphic regions of one or more genes selected from uPA (Urokinase plasminogen activator), SNGG (gamma-synuclein), IDB (insulindegrading enzyme), ENSL1 (Kinesin-like protein 1), LIPA (lysosomal acid lypase), and TNFRSFG (Tumour Necrosis Factor Receptor-SF6), where the presence of at least one of the allelic variant of one or more presence of at least one of the allelic variant of one or more cocurrence of neurodegenerative disease. The genes are all located on chromosome 10. M1 is useful for determining a predisposition for or the chromosome 10. M1 is useful for determining a predisposition for or the chromosome 10. M1 is useful for determining a predisposition for or the chromosome 10. M1 is useful for determining a predisposition for or the chromosome 10. M1 is useful for determining a predisposition for or the chromosome 10. M1 is useful for determining a predisposition for or the chromosome 10. M1 is useful for determining a predisposition for or the chromosome 10. M1 is useful for determining a predisposition for or the chromosome 10. M1 is useful for general induced in a port predisposition for or the chromosome 10. M1 is useful for general induced in a predisposition for or the chromosome 10. M1 is useful for general induced in a predisposition for or the interminant of the invention.

Sequence 18 BP; 5 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

ô Gaps . 0 4.3%; Score 12.4; DB 1; Length 18; 92.9%; Pred. No. 5.4e+02; tive 0; Mismatches 1; Indels 13; Conservative Query Match Best Local Similarity Best Loca Matches

셤 ò

·,

Chromosome 11 (locus D11S1108) STS primer cSRL-4a9-tA. AAQ82247 standard; DNA; 19 BP. (first entry) (revised) 25-MAR-2003 07-SEP-1995 AAQ82247; RESULT 429 AAQ8224

sequence sampled mapping, genomic analysis, complex genome mapping; cosmid library; chromosome 11; sequence tagged site; STS analysis; ss.

Synthetic.

WO9429486-A1.

22-DEC-1994.

94WO-US006810. 93US-00078471 15-JUN-1994; 15-JUN-1993; 07-SEP-1993; 

(SALK ) SALK INST BIOLOGICAL STUDIES.

93US-00117952

Evans GA, Smith MW;

WPI; 1995-036508/05.

Sequencing complex genomes, present as fragments in a cosmid library - by sequencing end-specific nuclectides of each clone then correlating with spatial relationship of cosmid, esp. for mammalian chromosomes.

Example 4; Page 72; 128pp; English.

Sequences were determined from the ends of chromosome 11-specific cosmids by automated sequencing without intermediate subcloning. A sample of 371

```
field.)
8866666666666888
```

and DNA sequence fragments were determined and of these, 277 were suitable for STS primer prediction by computer analysis (using the "Primer" program available from B. Lander, MIT). The STSs and cosmids were mapped by in situ hybridisation, somatic cell hybrid analysis or both. Using this method, 370 STSs specific for human chromosome 11 were generated an most of them were regionally mapped. This procedure illustrates a novel method for sequencing complex genomes, designated "sequence sampled mapping". The sequence sampled mapping method is useful for the completion of high density sequence-based maps, and ultimately, for the complete sequencing of genomic DNA directly from cosmid clones. See AAG82001-082706 for STS primers. (Updated on 25-MAR-2003 to correct PN

Sequence 19 BP; 5 A; 11 C; 1 G; 2 T; 0 U; 0 Other;

```
4.3%; Score 12.4; DB 1; Length 19; 22.9%; Pred. No. 5.8e+02; v.e 0; Mismatches 1; Indels
                       92.9%;
                                                                           923 CACCACCACCTCC 936
Query Match
Best Local Similarity 92.9 Matches 13, Conservative
                                                                           ò
```

2 caccaccacacrcc 15 a

```
AAV52006 standard; DNA; 19 BP.
          02-FEB-1999 (first entry)
       AAV52006;
RESULT 430
  AAV52006/
```

Zea mays genome reverse PCR primer #302.

Polymorphic marker, allele-specific, probe; amplification, PCR primer, hybridisation, plant, hybrid certification; genetic contribution; progeny, back-cross, hybrid, ancestry, corn, ss.

Synthetic. Zea mays. WO9824796-A1

11-JUN-1998

97WO-US021782. 01-DEC-1997; 96US-0032069P. 97US-00813507. 02-DEC-1996; 07-MAR-1997;

(AFFY-) AFFYMETRIX INC.

Landry BS, Sapolsky RJ, Murigneux A; Lemieux B,

WPI; 1998-333252/29.

species allele-specific oligonucleotide probes and primers useful for plant breeding Brassica

Example 1; Page 55; 65pp; English.

amplification or hybridisation, e.g. to determine common or disparate ancestry between 2 or more plants, to monitor the genetic contribution of an ancestral plant, to trace the progeny of proprietary plants, in certification of a hybrid plant or to identify the progeny of a back-crossed plant with an ancestral plant AAV51705-V52008 are reverse PCR primers used to amplify fragments of the Zea mays genome in order to detect polymorphic markers. Such markers can be used in the construction of allele-specific primers and probes for

DB 1; Length 19;

Sequence 19 BP; 4 A; 2 C; 10 G; 3 T; 0 U; 0 Other; 4.3%; Score 12.4; Query Match

```
;
0
               Gaps
             .,
92.9%; Fred. No. 5.8e+02; ive 0; Mismatches 1; Indels
             Conservative
Best Local Similarity
           13;
           Matches
```

919 TCATCACCACCACC 932 18 TCTTCACCACCACC à

RESULT 431 AAV15995/

AAV15995 standard; DNA; 19 BP.

AAV15995;

(first entry) 27-MAY-1998 NBCCS (PTC) gene exon 21 amplifying primer PTCR26.

0;

Gaps

·.

Nevoid basal cell carcinoma syndrome, NBCCS; PTC; PATCHED; detection, tumour suppressor; human; mutation; Gorlin's syndrome; PCR primer; ss.

Synthetic

Homo sapiens.

WO9743414-A2

20-NOV-1997

97WO-US008433. 16-MAY-1997;

96AU-00000011. 96AU-00000363. 96US-0017906P. 21-MAY-1996; 07-JUN-1996;

14-JUN-1996;

96US-0019765P 97US-00857636. 16-MAY-1997; (USSH ) US DEPT HEALTH & HUMAN SERVICES.

nn H, Wicking C, Christiansen J, Zaphiropoulos FG; Shanley S, Chidambaram A, Vorechovsky I, Holmberg E; Illies S, Negus K, Smyth I, Pressman C, Leffell DJ; Soldstein A, Wainwright B, Toftgard R, Chevenix-Trench G; Dean MF, Ha... Gailani MR, Shanle, Thden AB, Gillies S, Negu.

WPI; 1998-008883/01.

- useful for Nevoid basal cell carcinoma syndrome tumour suppressor gene detection of pre:disposition to basal cell carcinoma(s).

Claim 3; Page 79; 148pp; English.

This primer is used to the row ampitituation to axoun a nevotate basal cell carcinoma syndrome (NBCCS) (PTC) protein encoding CDMA. The basal cell carcinoma syndrome (NBCCS) (PTC) protein encoding CDMA. The NBCCS nucleic acid consistency of a 6568 (full-length sequence), compared to a second nucleic acid consistency of a 23 (AAVIS999) base pair sequence, in the presence of a human genomic library. The PTC polypeptide sequence in the presence of a human genomic library. The PTC polypeptide compared to a polypeptide encoded by the above three sequences. The NBCCS gene and its protein product, is a tumour suppressor, and is a composition to particular abnormal sequences, by thybridisation assays is useful for detecting a practiscostion to NBCCS or to a basal cell carcinoma (also known as Gorlin syndrome). Alternatively, detection is of the polypeptide and is carried out by immunosasay. Vectors comprising this nucleic acid can be used to treat NBCCS. The PTC polypeptide can mitigate symptoms of NBCCS in an organism. The NBCCS nucleic acid can be used to treat NBCCS. The PTC polypeptide can mitigate symptoms of NBCCS in an organism. The NBCCS nucleic acid can be useful from exact to matations, chosen from Exon-12 1711insC. Exon-12 1711insC, Exon-12 28640elBpb, Exon-16 2707delC, and Intron-17 3157-2A to G. The mutation may companish the mutation may be a nonsense or frameshiff mutation. Frameshiff mutation are chosen of from 244delCt, 27insA, 464insAC, 633insC, 8646187, 877delG, 929delC, 2183delTC, 22ioinsAA, 2392delA, 2593delA, 2583delBa, 2594delA, 2593delC, 2596complex, 771linsC, 2596co This primer is used for the PCR amplification of exon 21 of a nevoid 

Page 212

```
Human; ss; primer; cytochrome P450 A1; CYP4501A1; UGT2B4; MDR1; PCR; cytochrome P450 A2; CYP4501A2; cytochrome P450 02E; CYP4501B2; LTF; adrenergic receptor beta1; ANBR1; aryl hydrocarbon; AHR; MRP3; NR112; adrenergic receptor nuclear translocator; ARNT; cathepsin S; CTSS; cyclooxgenase 2; COX2; diazepam binding inhibitor; DB1; haematological; cyclooxgenase 2; EPK42; 5-lipoxygenase activating protein; FLAP; glutathione-S-transferase 12; GST12; histamine-N-methyl transferase; NNMT; WADPH quinone oxidoreductase 2; NQC2; sulfoctransferase; NNMT; WDP-glucuronosyl transferase 2; NQC2; sulfoctransferase 187; UDP-glucuronosyl transferase 287; UDP-glucuronosyl transferase 287; UDP-glucuronosyl transferase; UGT2B15; urokinase receptor; WM ultidrug resistance 1; lactotransferase; prostate; cecptor; wmultidrug resistance associated protein 3; cancer; prostate; cacetyloholine muscarinic receptor; CHMR1; CHMR2; CHMR3; CHMR5; child altered drug metabolism; cardiovascular function; colorectal tumour;
                                                                                                                                                                                                                          ö
              3538delG. The mutation may be missense, chosen from G391T, G1148A, G1368A, G1525T, C2050T, C2068T, C3015A, G3193C AND G4302T. Alternatively, the mutation alters mRNA splicing and is chosen from A1055-2C, 3157-2A to G and 1493-8ins1. All these mutations are claimed but their sequences are not provided in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Isolated nucleic acid molecules having polymorphisms in known human genes e.g. cytochrome p450 and cathepsin S useful as genetic linkage markers for locating, identifying and characterizing the genes responsible for disorder-related traits.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This invention relates to the sequence of an isolated nucleic acid molecule comprising at least one base variation from that of a known human cytochrome P450 al (CYP4501Al), cytochrome P450 ac (CYP4501Al), cytochrome P450 ac (CYP4501Al), adrenergic receptor betal (ADBRI), aryl hydrocarbon (AHR), aryl hydrocarbon receptor nuclear translocator
                                                                                                                                                                                                                          Gaps
2749dup7, 2988del8bp, 3014insA, 3352delAt and
                                                                                                                                                                                                                          0;
                                                                                                                                                                             Score 12.4; DB 1; Length 19;
Pred. No. 5.8e+02;
0; Mismatches 1; Indels
                                                                                                                                           Seguence 19 BP; 3 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     central nervous system; pulmonary; immunological.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human epoxide hydroxylase 2 PCR primer #22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 10; Page 116; 714pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                           ABS97495 standard; DNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-NOV-2000; 2000US-00724389.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-NOV-2001; 2001WO-US044838.
                                                                                                                                                                                 4.3%;
                                                                                                                                                                                                                                                                  808 CICCAACTCAGGGT 821
                                                                                                                                                                                                                                                                                                       CTCCAACTGAGGGT 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                          13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DNAS-) DNA SCI LAB INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-698522/75.
  2748insC,
                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hall J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200257410-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-JUL-2002
  2707delC,
                                                                                                                                                                                                                                                                                                         16
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABS97495;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Guida M,
                                                                                                                                                                                                                                                                                                                                                                       RESULT 432
                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                          ABS97495
                                                                                                                                                                                                                                                                                                           엄
                                                                                                                                                                                                                                                                                                                                                                                                                                 8888888888
                                                                                                                                                                                                                                                                       δ
```

```
cc (ARNT), cathepsin S (CTSS), cyclooxgenase 2 (COXZ), diazepam binding inhibitor (DBI), epoxide hydroxylase 2 (EPHX2), 5-lipoxygenase activating protein (FLAB), glutathione-5-transferase 12 (GST12), histamine-N-methyl transferase (HNWT), (kallikrein 2) KLKZ, nicotinamide-N-methyl transferase (HNWT), (kallikrein 2) KLKZ, nicotinamide-N-methyl transferase (HNWT), NADPH quinone oxidoreductase 2 (NQO2), canfortansferase thermolabile (STM), UDP-glucuronosyl transferase (UGT2B15), urokinase receptor (NPA), multidrug resistance 1 (NDR1), lactortransferrin (LTF), multidrug resistance associated protein 3 (NRP3), orphan nuclear receptor (NRMIZ), chamR4 or CHMR5) sequence. The polymorphisms in the human genes cited in the invention are useful as genetic linkage markers for locating and characterising the genes that are responsible for specific traits within the genome and eventually are responsible for specific traits within the genome and eventually care responsible for specific traits within the genome and eventually are responsible for underexpression, which may be used in diagnosing the polymorphic sequences contained in CYP4501A1, CYPP4501A2, CYP4501A1, ANNY, EPHX2, GST12, NNMT, NQO2, NR112, STM, UGT2B4, UGT2B7, UGT2B15, AHR, MNR1 and/or MDR3 may also be used to screen individuals for altered candor susceptibility to cancer. Polymorphic sequences on tained pulmonary, are useful for sequences on tained pulmonary, and the propagated tumorise, in DBI or CHMR1 for altered central nervous system function, in FLAP and HNWT for altered pulmonary in nervous system function, in FLAP and HNWT for altered immunological or haematological function, in LFMF for altered central and proved contained in the prostate, in LFMF for altered central and proved contained in the prostate, in LFMF for altered central and proved contained in the prostate, in LFMF for altered central and proved contained in the prostate, in LFMF for altered central and proved contained in the prostate, in LFMF for altered central and proved contained in the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence represents a PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HCV infection; replication; pathogenesis; virucide; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 12.4; DB 1; Length 19;
Pred. No. 5.8e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           peripheral nervous system function. The present sequen
primer used to amplify the sequences of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HCV coding region-derived 50% conserved RNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 19 BP; 4 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Yang Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Martinez A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADD00537 standard; RNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-AUG-2002; 2002WO-US021843.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-AUG-2001; 2001US-0313076P.
20-DEC-2001; 2001US-0344116P.
01-FEB-2002; 2002US-0353750P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         712 TCCCAGGAGAGTGA 725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rcccagragagraa 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glass JI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ELIL ) LILLY & CO ELI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003016572-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lu J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-FEB-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADD00537;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zhao G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADD00537
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     셤
```

```
RESULT 434
         Matches
                gene
            ð
```

```
435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
      8 8 8 8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                              qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                             The invention relates to a novel isolated double stranded RNA oligomucleotide about 19 to about 25 ribonucleotides in length or its equivalent. One strand of the oligomucleotide comprises the same nucleotide sequence as a region of a hepatitis C virus (HCV) target RNA polymucleotide sequence required for hepatitis C virus infection, replication or pathogenesis in vitro or in vivo in a host cell. The oligonucleotide of the invention demonstrates virucide activity and may be useful for preparing a composition or vaccine for treating or preventing hepatitis C virus, as well as during gene therapy procedures. The current sequence is that of the HCV coding region-derived conserved by a contract of the contraction or vaccine contraction of the contra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel isolated double stranded RNA oligonucleotide about 19 to about 25 ribonucleotides in length or its equivalent. One strand of the oligonucleotide comprises the same nucleotide sequence as a region of a hepatitis C virus (HCV) target RNA polynucleotide sequence required for hepatitis C virus infection, replication or pathogenesis in vitro or in vivo in a host cell. The oligonucleotide of the invention demonstrates virucide activity and may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                   New double stranded RNA oligonucleotide, useful for preparing a composition for treating or preventing hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New double stranded RNA oligonucleotide, useful for preparing composition for treating or preventing hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HCV infection; replication; pathogenesis; virucide; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 12.4; DB 1; Length 19;
Pred. No. 5.8e+02;
3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HCV coding region-derived 50% conserved RNA sequence 485.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 19 BP; 4 A; 6 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Yang
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Martinez A,
                                                                                                                                            Disclosure; Page 84; 173pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 84; 173pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RNA sequence of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-AUG-2001; 2001US-0313076P.
20-DEC-2001; 2001US-0344116P.
01-FEB-2002; 2002US-0353750P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-AUG-2002; 2002WO-US021843.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 Similarity 71.4%;
10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    854 GTCCTGGCTCCAGT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADD00539 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACCUGGCUCCAGU 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lu J, Glass JI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ELIL ) LILLY & CO ELI
WPI; 2003-268345/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-268345/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003016572-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADD00539;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zhao G,
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
be useful for preparing a composition or vaccine for treating or preventing hepatitis C virus, as well as during gene therapy procedures. The current sequence is that of the HCV coding region-derived conserved RNA sequence of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention relates to a novel isolated double stranded RNA oligonucleotide about 19 to about 25 ribonucleotides in length or its equivalent. One strand of the oligonucleotide comprises the same nucleotide sequence as a region of a hepatitis C virus (HCV) target RNA polynucleotide sequence required for hepatitis C virus infection, replication or pathogenesis in vitro or in vivo in a host cell. The oligonucleotide of the invention demonstrates virucide activity and may be useful for preparing a composition or vaccine for treating or preventing hepatitis C virus, as well as during gene therapy procedures. The current sequence is that of the HCV coding region-derived conserved
                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ಗ
                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New double stranded RNA oligonucleotide, useful for preparing composition for treating or preventing hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HCV infection; replication; pathogenesis; virucide; vaccine;
                                                                                                                                                                                                   4.3%; Score 12.4; DB 1; Length 19; 71.4%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.3%; Score 12.4; DB 1; Length 19; 1.4%; Pred. No. 5.8e+02; ve 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HCV coding region-derived 50% conserved RNA sequence 484.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 4 A; 7 C; 4 G; 0 T; 4 U; 0 Other;
                                                                                                                                           Sequence 19 BP; 5 A; 7 C; 4 G; 0 T; 3 U; 0 Other
                                                                                                                                                                                                                                                      3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Martinez A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure; Page 84; 173pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RNA sequence of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADD00538 standard; RNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-AUG-2001; 2011US-0313076P.
20-DEC-2001; 2011US-0344116P.
01-FEB-2002; 2002US-0353750P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-AUG-2002; 2002WO-US021843.
                                                                                                                                                                                                                                                                                                              854 GTCCTGGCTCCAGT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           71.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 854 GICCIGGCICCAGT 867
                                                                                                                                                                                                                                                                                                                                               3 GACCUGGCUCCAGU 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACCUGGCUCCAGU 18
                                                                                                                                                                                          Query Match
Best Local Similarity 71.43
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glass JI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similaricy
hes 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ELIL ) LILLY & CO ELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-268345/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gene therapy; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003016572-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhao G, Lu J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADD00538;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
```

```
The invention relates to a novel isolated double stranded RNA oligonucleotide about 19 to about 25 ribonucleotides in length or its equivalent. One strand of the oligonucleotide comprises the same nucleotide sequence as a region of a hepatitis C virus (HCV) target RNA polynucleotide sequence required for hepatitis C virus infection, replication or pathogenesis in vitro or in vivo in a host cell. The oligonucleotide of the invention demonstrates virucide activity and may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     be useful for preparing a composition or vaccine for treating or
preventing hepatitis C virus, as well as during gene therapy procedures.
The current sequence is that of the HCV coding region-derived conserved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RNA interference; short interfering nucleic acid; siNA;
short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New double stranded RNA oligonucleotide, useful for preparing composition for treating or preventing hepatitis C virus.
                                                                                                                                                             HCV infection; replication; pathogenesis; virucide; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.3%; Score 12.4; DB 1; Length 19; 71.4%; Pred. No. 5.8e+02; ative 3; Mismatches 1; Indels
                                                                                                                              HCV coding region-derived 50% conserved RNA sequence 486.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 5 A; 7 C; 4 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Martinez A, Yang Y;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human c-fos siNA lower strand, SEQ ID NO:154.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 84; 173pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ω
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RNA sequence of the invention.
                              ADD00540 standard; RNA; 19 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADE65699 standard; RNA; 19 BP.
                                                                                                                                                                                                                                                                                                            16-AUG-2002; 2002WO-US021843.
                                                                                                                                                                                                                                                                                                                                            17-AUG-2001; 2001US-0313076P.
                                                                                                                                                                                                                                                                                                                                                            20-DEC-2001; 2001US-0344116P.
01-FEB-2002; 2002US-0353750P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTCCTGGCTCCAGT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 GACCUGGCUCCAGU 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JAN-2004 (first entry)
                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                            Lu J, Glass JI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            (ELIL ) LILLY & CO ELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-268345/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                            Hepatitis C virus.
                                                                                                                                                                                                                                             WO2003016572-A1.
                                                                                                                                                                               gene therapy;
                                                                                               01-JAN-2004
                                                                                                                                                                                                                                                                             27-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADE65699;
                                                             ADD00540;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       854
                                                                                                                                                                                                                                                                                                                                                                                                                                              Zhao G,
RESULT 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADE65699
                                               a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

```
short hairpin RNA, shRNA, expression modulation, gene therapy, drug screening; diagnosis; therapeutic target identification; pharamogenemics; gene function analysis; gene mapping; central nervous system disorder, Alzhaimer's disease, Parkinson's disease, Parkinson's disease; Proliferative disease; Parkinson's disease; Porliferative disease; restenosis; polycystic kidney disease; inflammatory disease; allergic disease; viral infection, HIV infection, autoimmune disease; transplant rejection; vascaropic; nootropic, antiparkinsonian; neuroprotective; cytostatic; anticonvulsant; nephrotropic; human; c-fos; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SIRN-) SIRNA THERAPEUTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2002US-0358580P.
2002US-0363124P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002US-0386782P.
2002US-0406784P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2002US-0408378P.
2002US-0409293P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .5-JAN-2003; 2003US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-FEB-2003; 2003WO-US005162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mcswiggen J, Beigelman L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-679877/64.
                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003070914-A2
                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-FEB-2002;
11-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-AUG-2003.
```

New short interfering nucleic acid downregulates expression of the c-fos gene useful for treatment and diagnosis of diseases, e.g. cancer and inflammation.

Example 3; SEQ ID NO 154; 145pp; English.

The invention relates to short interfering nucleic acids (siNh) which downregulate expression of the human c-fos gene by RNA interference. The siNAs may or may not comprise ribonuclectides and may be double or single stranded. They further comprise ribonuclectide and an antisense regions, or alternatively are assembled from a sense oligonuclectide and an antisense oligonuclectide. Specifically, the siNAs include short interfering RNA (siRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (siRNA). The siNAs can be unmodified or chemically modified, can contain decoxyribonuclectides, and can be chemically synthesised, expressed (trom a vector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA; conjugates and/or complexes for the in vitro or in vivo delivery of siNA; conjugates and/or complexes of siNA, and vectors that express siNA. The siNAs are used to modulate expression of the c-fos gene in cells, tissue explants or organisms corpus that express siNA; and vectors therefore a variety of conditions. They may be used for treating central nervous system lesions and injuries (e.g., Alzheimer's disease, Huntington's disease, epilepsy, dementia or creatment of a variety of conditions. They may be used for treating central nervous system lesions and injuries (e.g., Alzheimer's disease) and variable for cancers; other proliferative diseases (e.g., restenosis and polycystic kidney disease); inflammatory and/or allergic diseases; and transplant rejection. The sinAs are also useful for drug screening, diagnosis, therapeutic target identification and cutoinmune diseases, and transplant rejection. The sinAs are also useful function, and gene mapping (e.g., of single nucleotide polymorphisms).

The present sequence represents the lower strand of a human c-fos-targeted double-stranded sinA.

ö

Sequence 19 BP; 4 A; 6 C; 2 G; 0 T; 7 U; 0 Other;

Query Match
4.3%; Score 12.4; DB 1; Length 19;
Best Local Similarity 50.0%; Pred. No. 5.8e+02;
Matches 7; Conservative 6; Mismatches 1; Indels 0; Gaps

0;

893 ACTICICAGCITCT 906

à

```
The invention relates to short interfering nucleic acids (siNA) which downregulate expression of the human c-fos gene by RNA interference. The siNAs may or may not comprise ribonucleotides and may be double or single stranded. They further comprise sense and antisense regions, or constraints of alternatively are assembled from a sense oligonucleotide and an antisense oligonucleotide. Specifically, the siNAs include short interfering RNA (SiRNA), double-stranded RNA, micro-RNA (miRNA) and short hairpin RNA (SiRNA). The siNAs can be unmodified or chemically modified, can contain decoxyribonucleotides, and can be chemically synthesised, expressed from a covector or enzymatically synthesised. The invention also relates to kits for the in vitro or in vivo delivery of siNA, conjugates and/or complexes of siNA, and vectors that express siNA. The siNAs are used to modulate expression of the c-fos gene in cells, tissue explants or organisms (e.g., by ex vivo gene therapy), or in grafts and transplants for the creatment of a variety of conditions. They may be used for treating central nervous system lesions and injuries (e.g., Alzheimer's disease,
                                                                                                                                                                                                                                                                                  RNA interference; short interfering nucleic acid; sinh, short interfering RNA; siRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; double-stranded RNA; micro-RNA; miRNA; short hairpin RNA; shRNA; expression modulation; gene therapy; dury screening; diagnosis; therapeutic target identification; pharmacogenomics; gene function analysis; gene mapping; central nervous system disorder; Alzheimer's disease; central screening sistem disorder; Alzheimer's disease; anyotrophic lateral sclerosis; cancer; proliferative disease; restenosis; polycystic kidney disease; inflammatory disease; transplant rejection; viral infection; HIV infection; autoimmune disease; transplant rejection; vasotropic; nootropic; antiparkinsonian; neuroprotective; cytostatic; antiinflammatory; antiallergic; virucide; anti-HIV; immunosuppressive; antiinflammatory; nephrotropic; human; c-fos; target sequence; ss.
                                                                                                                                                                                                                                                 Human c-fos transcript target sequence/siNA upper strand, SEQ ID NO:38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New short interfering nucleic acid downregulates expression of the cagene useful for treatment and diagnosis of diseases, e.g. cancer and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 3; SEQ ID NO 38; 145pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SIRN-) SIRNA THERAPEUTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
2002US-0409378P.
2003US-0440129P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-FEB-2003; 2003WO-US005162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002US-0358580P
                                                                                                                      ADE65583 standard; RNA; 19
4 ACUUCUCAUCUUCU 17
                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Beigelman L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-679877/64.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003070914-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-SEP-2002;
09-SEP-2002;
15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               nflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-MAR-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-AUG-2002;
                                                                                                                                                                                                         29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-AUG-2003
                                                                                                                                                                ADE65583;
                                                                                                  ADE65583
                                                                               RESULT
             g
```

ö Parkinson's disease, Huntington's disease, epilepsy, dementia or amyotrophic lateral sclerosis); various cancers; other proliferative diseases (e.g., restenosis and polycystic kidney disease); inflammatory and/or allergic diseases; viral infections (including HIV infection); autoimmune diseases; viral infections (including HIV infection); for drug screening, diagnosis, therapeutic target identification and validation, and gene mapping (e.g., of single nucleotide polymorphisms). The present sequence represents the upper strand of a human c-fostargeted double-stranded siNA, which is identical to the c-fos transcript short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic, antidabetic; antiinflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriatis; inflammatory bowel disease; drug screening; Gaps Mitogen activated protein kinase sinA oligonucleotide SEQ ID NO:871. ; 4.3%; Score 12.4; DB 1; Length 19; 92.9%; Pred. No. 5.8e+02; ive 0; Mismatches 1; Indels genetic engineering; pharmacogenomic; gene mapping; ss Sequence 19 BP; 7 A; 2 C; 6 G; 0 T; 4 U; 0 Other; 20-FEB-2002; 2002US-0358580P. 11-WAR-2002; 2002US-0363124P. 06-JUN-2002; 2002US-0386782P. 29-AUG-2002; 2002US-0406784P. 05-SEP-2002; 2002US-0408378P. ADE30249 standard; RNA; 19 BP. 28-JAN-2003; 2003WO-US002510. 893 ACTICICAGCIICI 906 (first entry) 16 ACTTCTCATCTTCT 3 13; Conservative Query Match Best Local Similarity target sequence. WO2003072590-A1. 29-JAN-2004 04-SEP-2003 Synthetic. ADE30249; RESULT 439 Matches ADE30249 ð g

The present invention describes a short interfering nucleic acid (siNA) that downregulates expression of a mitogen-activated protein kinase (WAPK) genes by RNA interference. Also described: (1) a method for

Example 3; SEQ ID NO 871; 164pp; English.

protein kinase genes.

New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated

Chowrira B;

Usman N, Haeberli P,

(SIRN-) SIRNA THERAPEUTICS INC.

Mcswiggen J, Beigelman L,

WPI; 2003-689980/65.

2003US-0440129P

15-JAN-2003;

Example 3; SEQ ID NO 598; 164pp; English.

```
modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of siNA; (2) kits for in vitro or in vivo cellivery of siNA; (3) conjugates and/or complexes of siNA; and (4) cellivery of siNA; (3) conjugates and/or complexes of siNA; and (4) cectors that express siNA and cells containing these vectors. MAPK siNAs chave cytostatic, ancretic, antidiabetic, antiinflammatory, antiatheristic, immunosuppressive, antibacterial, antirhenuatic, antipsoriatic and gastrointestinal activities. The MAPK siNAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes types I and II; a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics; studying gene function and gene mapping (e.g. of sindle-nucleotide studying gene function and gene mapping (e.g. of sindle-nucleotide studying per function and gene presents a MAPK siNA which is used
                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; eytostatic; anorectic; antidiabetic; antinflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.
                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mitogen activated protein kinase sina oligonucleotide SEQ ID NO:598.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated protein kinase genes.
                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Haeberli P, Chowrira B;
                                                                                                                                                                                                                                                                                                                                                                     4.3%; Score 12.4; DB 1; Length 19; 57.1%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                   Sequence 19 BP; 3 A; 2 C; 8 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                 the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Beigelman L, Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                             5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (SIRN-) SIRNA THERAPEUTICS INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2002US-0358580P.
2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADE29976 standard; RNA; 19 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002US-0408378P.
2002US-0409293P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-JAN-2003; 2003WO-US002510.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2003US-0440129P
                                                                                                                                                                                                                                                                                                                                                                                                                                                     817 AGGGTTGGCTGTGT 830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 AGUGUUGGCUGUGU 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-689980/65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003072590-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-MAR-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADE29976;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADE29976/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

```
the present invention describes a sucre interpression of a mitogeneral contract procession of the present invention of Mark genes in cells, tissue explants or condulating expression of Mark genes in cells, tissue explants or corganisms by introduction of fina, (2) kits for in vitro or in vivo delivery of sina, (3) conjugates and/or complexes of sina, and (4) corganisms by introduction of sina, (2) kits for in vitro or in vivo delivery of sina, (3) conjugates and/or complexes of sina, and (4) and cells containing these vectors. Mark sinas correctic, ancretic, antidacterial, antinflammatory.

Contractic, ancretic, antidabetic, antinflammatory and (4) antiasthmatic, immunosuppressive, antibacterial, antirheumatic, antisorial activities. The Mark sinas can be used to modulate the expression of Mark genes, in cells, sinas can be used to modulate the expression of Mark genes, in cells, cissue explants or organisms, e.g. for treating obesity, diabetes types I cand II; a wide range of tumours, and inflammatory diseases (asthma, corganisms, e.g. for drug screening; diagnosis; target disease). They can also be used for drug screening; diagnosis; target continitication and validation; genetic engineering; pharmacogenomics; cidentification and validation; genetic engineering; pharmacogenomics; cudying gene function and gene mapping (e.g. of single-nucleotide contineering) the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
                                            The present invention describes a short interfering nucleic acid (siNA)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase, MAP kinase, MAPK, RNA interference; cytosfeatic; anorectic, antidiabetic; antiinflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mitogen activated protein kinase sinA oligonucleotide SEQ ID NO:1080.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ë,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chowrira
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.3%; Score 12.4; DB 1; Length 19; 92.9%; Pred. No. 5.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Haeberli P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 19 BP; 7 A; 3 C; 7 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (SIRN-) SIRNA THERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2002US-0363124P.
2002US-0386782P.
2002US-0406784P.
2002US-0408378P.
2002US-040923P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2002US-0358580P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-JAN-2003; 2003WO-US002510.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J, Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            803 CTCTCCTCCAACTC 816
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE30458 standard; RNA; 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14 CTCTCCTCCAAGTC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-689980/65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003072590-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-SEP-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-FEB-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-MAR-2002;
06-JUN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-AUG-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JAN-2003;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE30458;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADE30458/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                셤
^{8} \times ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9} ^{9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ò
```

Chowrira B;

Haeberli P,

Usman N,

Mcswiggen J, Beigelman L,

WPI; 2003-689980/65.

(SIRN-) SIRNA THERAPEUTICS INC.

New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated protein kinase genes.

Example 3; SEQ ID NO 1080; 164pp; English.

have cytostatic, anorectic, antidiabetic, antinflammatory, antidiabetic, immunosuppressive, antidiabetic, antinflammatory, antipsoriatic and gastrointestinal activities. The MAPK siNAs can be used to modulate the expression of MAPK genes, in cells, tissue explants or organisms, e.g. for treating obesity, diabetes types I and II; a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; diagnosis; target identification and validation; genetic engineering; pharmacogenomics, studying gene function and gene mapping (e.g. of single-nuclectide polymorphisms). The present sequence represents a MAPK siNA which is used that downregulates expression of a mitogen-activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of SiNA; (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA, and (4) vectors that express siNA and cells containing these vectors. MAPK siNAs The present invention describes a short interfering nucleic acid (siNA) in the exemplification of the present invention.

Sequence 19 BP; 6 A; 8 C; 2 G; 0 T; 3 U; 0 Other;

Gaps ·, Score 12.4; DB 1; Length 19; Pred. No. 5.8e+02; 0; Mismatches 1; Indels 4.3%; Best Local Similarity 92.9 Matches 13; Conservative Query Match ð

ô

817 AGGGTTGGCTGTGT 830

ADE30055

Mitogen activated protein kinase siNA oligonucleotide SEQ ID NO:677.

short interfering nucleic acid; siNA; downregulation; inhibition; mitogen-activated protein kinase; MAP kinase; MAPK; RNA interference; cytostatic; anorectic; antidabetic; antinflammatory; antiasthmatic; immunosuppressive; antibacterial; antirheumatic; antiarthritic; antipsoriatic; gastrointestinal; obesity; diabetes; tumour; inflammatory disease; asthma; septic shock; rheumatoid arthritis; psoriasis; inflammatory bowel disease; drug screening; genetic engineering; pharmacogenomic; gene mapping;

Synthetic.

WO2003072590-A1.

04-SEP-2003

28-JAN-2003; 2003WO-US002510.

2002US-0358580P. 20-FEB-2002; 11-MAR-2002; 06-JUN-2002;

2002US-0363124P. 2002US-0386782P. 2002US-0406784P. 2002US-0408378P. 2002US-040929P. 2003US-0440129P. 05-SEP-2002; 09-SEP-2002; 15-JAN-2003; 29-AUG-2002;

ADE30055 standard; RNA; 19 BP 29-JAN-2004 (first entry) 19 AGTGTTGGCTGTGT 6 ADE30055; d 

Philadelphia chromosome, inflammation, autoimmune disease, atherosclerosis, myocardial infarction; stroke, restenosis, transplant rejection, rhumatoid arthritis, psoriasis, myocardial ischaemia, Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; Rat ICAM hammerhead ribozyme target sequence (nt. position 456) gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; INF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; 

Rattus rattus.

31-AUG-1995.

W09523225-A2

95WO-IB000156. 23-FEB-1995;

that downregulates expression of a mitogen-activated protein kinase (MAPK) genes by RNA interference. Also described: (1) a method for modulating expression of MAPK genes in cells, tissue explants or organisms by introduction of MAPK genes in cells, tissue explants or organisms by introduction of fina, (2) kits for in vitro or in vivo delivery of siNA; (3) conjugates and/or complexes of siNA; and (4) vectors that express siNA and cells containing these vectors. MAPK siNAs have expressive, antidabetic, antinheumatic, antidacterial, antiherumatic, antidacterial antiherumatic, antisoriatic and gastrointestinal activities. The MAPK siNAs can be used to modulate the expression of MAPK genes; in cells, tissue explants or organisms, e.g. for treating obesity; diabetes types I can lil a wide range of tumours, and inflammatory diseases (asthma, septic shock, rheumatoid arthritis, psoriasis and inflammatory bowel disease). They can also be used for drug screening; pharmacognomics; indinitication and validation; genetic engineering; pharmacognomics; studying gene function and gene mapping (e.g. of single-nucleotide polymorphisms). The present sequence represents a MAPK siNA which is used in the exemplification of the present invention. The present invention describes a short interfering nucleic acid (siNA) New short interfering nucleic acid, useful e.g. for treatment and diagnosis of cancer, downregulates expression of mitogen-activated protein kinase genes. . Query Match 4.3%; Score 12.4; DB 1; Length 19; Best Local Similarity 64.3%; Pred. No. 5.8e+02; Matches 9; Conservative 4; Mismatches 1; Indels Sequence 19 BP; 2 A; 7 C; 3 G; 0 T; 7 U; 0 Other; Example 3; SEQ ID NO 677; 164pp; English. BP 803 CTCTCCTCCAACTC 816 AAT53440 standard; RNA; 17 6 cucuccuccaague 19 (revised)
(first entry) 25-MAR-2003 27-MAR-1997 AAT53440; RESULT 443 AAT53440

a

ò

0;

Gaps

```
·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present sequence represents a preferred target sequence for an enzymatic nuclectic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozymes cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatoid archritis, asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen JA;
er D, Thompson JD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Dudycz LW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 17; 58.8%; Pred. No. 5.5e+02; iive 4; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Draper KG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 2 A; 8 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Direnzo A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Karpeisky A, Kisich K,
Pavco P, Beigleman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 2; Page 201; 407pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wincott FE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  897 CTCAGCTTCTGCGATCA 913
                  94US-00201109.
94US-00218934.
94US-00224483.
94US-00224483.
94US-00224519.
94US-00245736.
94US-00291932.
94US-00291433.
94US-00291433.
                                                                                                                                                                                                                                                                                                                                                 9405-00303039-9405-00311486-9405-00311499-9405-00316493-9405-0031993-9405-00334847-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345516-9405-00345617-9405-00345617-9405-00345617-9405-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-00345617-9405-0034561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cuceecuncueccacca 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chowrira B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1995-351090/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pavco P,
Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 10; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stinchcomb DT,
                                                                                                                                                                        18-MAY-1994;
                                                                                                                                                                                                                          15-AUG-1994;
16-AUG-1994;
                                                                                                                                                                                                                                                                                                    1994;
                                                                                                                                                                                                                                                                                                                              1994;
                                                                                                                                                                                                                                                                                                                                                      08-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                              23-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                        23-SEP-1994;
28-SEP-1994;
                                                                                                                                                   1994;
                                                                                                                                                                                                                                                                               AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-OCT-1994;
11-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-0CT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-NOV-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Grimm S,
Modak A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tracz D,
                                                                                                                                                                                                                                                                                                                                 SEP-
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

ВР

AAT73235 standard; DNA; 17

RESULT

(first entry)

28-AUG-1997

```
·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a novel apparatus for detecting contaminants, especially micro-organisms, in a fluid, preferably a blood product, which comprises a primary chamber for fluid storage and a secondary chamber containing at least one detection reagent, especially selected from the probes AATJ3231-5. The probes are targeted to bacterial rRNA sequences and do not react with human leucocyte or calf rRNA sequences is specific for a 16S rRNA sequence
                                    Apparatus, detection, contaminant; micro-organism; fluid; blood; probe; bacterial rRNA sequence; human; leucocyte; calf; 16S rRNA; ss.
                                                                                                                                                                                                                                                                                                                           Apparatus for detecting contamination (esp. bacteria or leucocytes) in fluid - esp. in stored blood products, comprises storage chamber and attached detection chamber contg. appropriate reagents into which a sample of stored fluid is passed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human flt1 VEGF receptor hammerhead ribozyme substrate #618.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 2 A; 11 C; 0 G; 4 T; 0 U; 0 Other;
           Probe #5 targets bacterial 16S rRNA gene
                                                                                                                                                                                                                                                                                                                                                                                                          Claim 21; Page 21; 32pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 920 CATCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX69323 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96WO-US017480.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95US-0005974P.
                                                                                                                                                                              96WO-GB001217
                                                                                                                                                                                                          95GB-00010262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 82.4%;
                                                                                                                                                                                                                                          (NABL-) NAT BLOOD AUTHORITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCCCCACCTTCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Foetal liver kinase 1; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14; Conservative
                                                                                                                                                                                                                                                                                                  WPI; 1997-020907/02.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9715662-A2
                                                                                                                                                                              21-MAY-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-0CT-1996;
                                                                                                                    WO9637177-A2
                                                                                                                                                                                                            22-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAY-1997
                                                                                                                                               28-NOV-1996
                                                                                      Synthetic.
                                                                                                                                                                                                                                                                        Rider JR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX69323/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             셤
```

96US-00584040

11-JAN-1996;

Escobedo J;

```
Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                     The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
                                                                                                                                                                                                                                                                                                                                 angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #169
                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.2%; Score 12.2; DB 1; Length 17; 12.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 6 A; 2 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stinchcomb D,
                                                                                Stinchcomb D,
                                                                                                                                                                                                         Claim 4; Page 65; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     865 AGTIGGAACACTITCCT 881
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX72736 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96WO-US017480.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95US-0005974P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96US-00584040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82.48;
                              (RIBO-) RIBOZYME PHARM INC
(CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (RIBO-) RIBOZYME PHARM INC. (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCTGAAATACTTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                              Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mcswiggen J,
                                                                                                            WPI; 1997-259017/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-259017/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-MAY-1997
                                                                              Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX72736;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX72736
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
```

```
0
                                                         The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV10748-V10777 are primers used in a method to identify the novel human breast cancer gene CH13-2a12-1 by differential display. The identified genes or fragments of these genes can be used for identifying genes and gene products that are intimately related to malignant transformation or maintenance of the malignant properties of cancer cells. It can also be used to design or screen diagnostic reagents or therapeutic compounds.
                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Breast cancer genes - used to develop products to design or screen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Breast cancer; malignant transformation; diagnostic; therapeutic;
                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                    Score 12.2; DB 1; Length 17;
Pred. No. 5.5e+02;
4; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Kits are included within the scope of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human breast cancer gene CH13-2a12-1 primer SP6.4.
                                                                                                                                                                                                                                     Sequence 17 BP; 4 A; 5 C; 4 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (CALP-) CALIFORNIA PACIFIC MEDICAL CENT RES INST.
rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         diagnostic reagents or therapeutic compounds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure, Fig 15, 118pp, English.
                               Page 127; 218pp; English
                                                                                                                                                                                                                                                                                                                                 869 GGAACACTTTCCTGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                              1 daaacccuruccudeda 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96US-0015167P.
96WO-US009286.
96US-0019202P.
96US-00678280.
                                                                                                                                                                                                                                                                     4.2%;
58.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97WO-US005930.
                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV10758 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                  10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        screening; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1997-512705/47.
                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9738085-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-APR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-OCT-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV10758;
                               Claim 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Smith H,
                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 447
                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                               AAV10758
                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                              엄
```

ö

Gaps

0;

Sequence 17 BP; 1 A; 3 C; 4 G; 9 T; 0 U; 0 Other;

Escopedo J;

RESULT 448

ð g AAT8830,

```
This is the nucleotide sequence of a PCR primer used for amplification in the method of the invention involving the use of structure-specific nucleases. In this process thermostable structure-specific nucleases are derived from mutant DNA polymerases, which can be used for detecting mutant alleles or strains of microorganisms. The structure-specific nucleases can be used in mixtures, compositions and kits to treat nucleic acid, e.g. for detection of wild type and mutant alleles of genes, for detection and/or identification of strains of microorganisms such as bacteria, fungi, protozoa, especially for detection of RNA viruses such as the hepatitis C virus (HCV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BRCAL; mutation detection; disease screening; multiple allele variation; breast cancer; ovarian cancer; cystic fibrosis; Li-Fraumeni syndrome; Duchenne muscular dystrophy; Becker muscular dystrophy; PCR primer; ss.
                                                                                                                                                                                                                                                                                             Thermostable structure-specific nuclease(s) derived from mutant DNA polymerase(s) - useful for detecting mutant allele(s) or strains of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 7 A; 2 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                               Kaiser MW, Lyamichev VI, Lyamicheva N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Probe for BRCA1 (omi1) coding sequence.
                                                                                                                                                                                                                                                                                                                                                                         Example 41; Page 302; 472pp; English.
                                                                                                                                                                                          (THIR-) THIRD WAVE TECHNOLOGIES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    892 TACTTCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US006002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97US-00825487.
                                                                                                      97WO-US021783
                                                                                                                                        96US-00757653.
96US-00758314.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 ractragéagériérre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV62212 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Murphy PD, White MB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ONCO-) ONCORMED INC
                                                                                                                                                                                                                                                                   WPI; 1998-322748/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                          microorganisms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-MAR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9844157-A2
                                                                                                      26-NOV-1997;
                                                                                                                                           29-NOV-1996;
                                                                                                                                                            02-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-FEB-1999
                                 W09823774-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-OCT-1998
                                                                     04-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAV62212;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ó
                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence is an oligonucleotide primer used in the preparation of complementarity determining region 3 (CDR3) libraries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PCR; primer; amplification; Taq mutant gene; thermostable; nuclease;
mutant; DNA polymerase; bacteria; fungi; protozoa; RNA virus;
hepatitis C virus; HCV; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Preparation of human derived antibody gene library - using synthetic consensus sequences, and signal consensus antibody gene as universal framework for highly diverse antibody libraries.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                       ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ge L, Moroney S, Plueckthun A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 82.4%; Pred. No. 5.5e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                    Length 17;
                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                          Oligonucleotide primer; preparation; library; CDR3; complementarity determining region; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 1 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleotide sequence of the PCR primer 025-164-07.
                  Score 12.2; DB 1;
Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (MORP-) MORPHOSYS GES PROTEINOPTIMIERUNG MBH.
                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; Page 32; 436pp; English.
                                                                                                                                                                                                                                                                                                                           Oligonucleotide primer 03HCDR33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                           834
                                                                                                                                                                                                                    AAT88304 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           caddaraccirdaccc 17
                                                                                                                            1 GGATTGTCTTTGTCTCT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pack P, Ilag V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96WO-EP003647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95EP-00113021
                    Query Match
Best Local Similarity 82.4%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV53983 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-DEC-1998 (first entry)
                                                                                             818 GGGTTGGCTGTGTCTCT
                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-179277/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9708320-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-AUG-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-AUG-1995;
                                                                                                                                                                                                                                                                                           22-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-MAR-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Knappik A,
                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV53983;
                                                                                                                                                                                                                                                         AAT88304;
```

449

RESULT

g à

AAV53983,

0;

Gaps

0

```
Identifying variations in polynucleotide sequences - using allele specific hybridisation assay, sequence variation locating assay, and direct sequencing, in a stepwise procedure.
                                                                                                                                                                                                                                     Example 1; Page 27; 62pp; English.
WPI; 1998-542713/46
```

This sequence represents a probe for a fragment of the DNA encoding the human BRCA (omil) protein, and was used to test the method of the invention. The method is for determining the presence or absence of a sequence variation in a gene sample, and comprises: (a) performing an allele specific hybridisation assay for one or more pre-determined sequence variations; (b) if no pre-determined sequence variation found in step (b) then sequencing the gene sample; sequence variation found in step (b) then sequencing the gene sample; (ci) if sequence variation by analysing the sequence(s) obtained the presence of a sequence variation by analysing the sequence(s) obtained in step (ci) a sequence variation by analysing the sequence(s) obtained in step (ci) or step (ci) against a reference sample. Alternatively, step (a) or step (b) is omitted from the method. The invention provides a stepwise and integrated method for the efficient and accurate detection of variations diseases associated with multiple allele variations, including breast and covarian cancer, cystic fibrosis, buchenne and Becker muscular dystrophy, Sequence 17 BP; 7 A; 4 C; 5 G; 1 T; 0 U; 0 Other;

AAA20987 standard; RNA; 17 BP

AAA20987/

(first entry)

19-JUN-2000

AAA20987;

4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ive 0; Mismatches 3; Indels 706 AGCGAGTCCCAGGAGAG 722 82.48; 1 AGAGAATCCCAGGACAG Conservative Local Similarity nes 14; Conserv Query Match Matches à

17

ó

Gaps

0;

AAV94630 standard; RNA; 17 BP 24-FEB-1999 AAV94630; RESULT 451 

(first entry)

Human IL-2 receptor g-chain substrate position 337.

Human, IL-2 receptor g-chain; interleukin 2 receptor gamma chain; hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer; autoimmune disease; psoriasis; allergy; inflammatory disease; graft rejection; ss

Homo sapiens

WO9824913-A2

11-JUN-1998

97WO-US021748. 02-DEC-1997;

96US-00758306 03-DEC-1996;

(RIBO-) RIBOZYME PHARM INC.

Mcswiggen JA; Stinchcomb DT,

WPI; 1998-33332/29

Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer, autoimmune disease and allergies.

```
the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA. AAV93889 to AAV94574 represent specifically claimed ribozymes, and AAV94575 to AAV95260 represent specifically claimed substrate sequences from the present invention. The ribozymes can be used for the treatment
                                                                                                                                                    of, e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy and other inflammatory conditions. The ribozymes are also used to induce tolerance in a recipient to alloantigen from a donor
                                                targeted to modulate
                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                           4.2%; Score 12.2; DB 1; Length 17; 47.1%; Pred. No. 5.5e+02; ive 6; Mismatches 3; Indels
                                            The present sequence invention describes ribozymes
                                                                                                                                                                                                                                               Sequence 17 BP; 6 A; 3 C; 2 G; 0 T; 6 U; 0 Other;
Claim 4; Page 34; 61pp; English.
                                                                                                                                                                                                                                                                                                                                                                               835 TTTCTCTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                                                                                                                             1 UCUAUUCUCUGAAGAAA
                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                              Local Similarity
tes 8; Conserv
                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 452
                                                                                                                                                                                                                                                                                                                                Matches
8 X C C C C C C C X X S
                                                                                                                                                                                                                                                                                                                                                                                 à
```

. 0

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiniflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss. Integrin alpha 6 subunit substrate sequence SEQ ID NO:4213. 

WO9950403-A2 Homo sapiens

24-MAR-1999; 07-0CT-1999

99WO-US006507. 98US-0079678P. 27-MAR-1998;

(RIBO-) RIBOZYME PHARM INC.

Mcswiggen JA, Coeshott C, Jarvis T, Roberts E, Pavco PA,

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

WPI; 1999-591315/50.

Claim 55; Page 180; 305pp; English.

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNY) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAAI755 to AAAI7167 and AAAI7561 to AAAI7622 represent ribozyme sequences for ARNT, and AAAI7168 to AAAI7622 represent ribozyme sequences for ARNT, corresponding target sequences; AAAI7683 to AAAI7684 represent their AAAI1955 to AAAI18365 to AAAI18365 to AAAI19086 and AAAI9155 to AAAI9222 represent their corresponding target sequences for Tie-2, and AAAI836 to AAAI19086 and AAAI9223 to AAAI9222 represent their corresponding target sequences; AAAI9223 to AAAI9255 represent ribozyme

```
The invention relates to the use of allele-specific oligonucleotides AAX3476-XX4391 as probes for the detection of mutant BRCA1 and BRCA2 genes. The probes are immobilised on a membrane and labelled target nucleotide sequences, which hybridise to the probes, are detected after a single hybridization step. The method and allele-specific oligonucleotides are used to detect gene mutations that predispose individuals to breast and ovarian cancer
                                                                                                                                                                                                                                                                                                                                                                                    ö
                AAA21696 to AAA21688 represent their corresponding target sequences;
AAA21696 to AAA21688 represent their corresponding target sequences;
AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
for integrin subunit beta 3, and AAA22476 to AAA233262, AAA23343 to
AAA23422 represent their corresponding target sequences. The ribozymes of
the invention are used for modulating the synthesis, expression and/or
stability of an mRNA encoding angiogenic factor, especially ARMT,
integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
especially used to treat cancer, diabetic retinopathy, age related
macular degeneration (ARMD), inflammation, and arthritis, as well as
neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris,
angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Primer; PCR; amplification; exon 2; human; BRCA1; BRCA2; allele; probe; hybridisation; detection; mutation; breast; ovarian; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Detection of BRCA1 and BRCA2 gene mutations in a single hybridization
                                                                                                                                                                                                                                                                                                                                                                                        Gaps
and AAA20362 to AAA21500 and
                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wild type BRCA1 exon 20 allele-specific probe 5382WT-1.
                                                                                                                                                                                                                                                                         integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 6 A; 2 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
    integrin alpha 6 subunit,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 9; Page 16; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                              959 CCAAATTGACTCTCAA 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX34382 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98WO-US020256.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-0059729P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 ccaaarrgaarrrcrga 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                        14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (ONCO-) ONCORMED INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rabin MB, Farrow J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-254727/21.
                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           W09915704-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX34382;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX34382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Пþ
                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
        $555555555555555555%&
```

4.2%; Score 12.2; DB 1; Length 17;

Sequence 17 BP; 7 A; 4 C; 5 G; 1 T; 0 U; 0 Other;

Query Match

```
0
          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EA83/COUB-TF-1, the GATA transcription factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP).

Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoietin, granulocyte colony stimulating factor protein and interferon alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present invention relates to enzymatic and antisense nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
            Gaps
                                                                                                                                                                                                                                 Ribozyme; erythropoietin; granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ive 0; Mismatches 3; Indels
            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 8 A; 4 C; 1 G; 4 T; 0 U; 0 Other;
5.5e+02;
 Pred. No. 5.5e
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hammerhead ribozyme substrate #2256.
                                                                                                                                                                                                            Hammerhead ribozyme substrate #1808.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 97; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               881
             ;
0
                                       722
                                                                17
                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Blatt L, Zwick M, Pavco P,
                                                                                                                                                                                                                                                                                                                                                       11-APR-2000; 2000WO-US009721
                                                                                                                                                                                                                                                                                                                                                                                 99US-0129390P
  82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               865 AGTIGGAACACTITCCI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTIGGAAGATTTTTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAF04740 standard; DNA; 17
                                                                 1 AGAGAATCCCAGGACAG
                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                 AAF04292 standard; DNA; 17
                                       706 AGCGAGTCCCAGGAGAG
                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 82.4
Matches 14; Conservative
               14; Conservative
                                                                                                                                                                                                                                                  interferon alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2000-647423/62
  Best Local Similarity
                                                                                                                                                                                                                                                                                                      WO200061729-A2.
                                                                                                                                                                                    16-FEB-2001
                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                  12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-FEB-2001
                                                                                                                                                                                                                                                                                                                               19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF04740;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17
                                                                                                                                                           AAF04292;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF04740/C
                Matches
                                                                                                                     AAF04292,
                                                                                                                                  SEX EX EX EX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                           ð
                                                                 g
```

```
24-MAR-2000; 2000US-0191996P.
                                                                                                                                                                  Best Loc
Matches
                                                                                                                                                                                                                                   RESULT 457
                                                                                                                                                                                                                                           AA165850
                                                                                                                                                                                                                                                          g
                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                            The present invention relates to enzymatic and antisense mucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATTA transcription factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoletin, granulocyte colony stimulating factor protein and interferon alpha
                                                                                                                                                            Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                            Gaps
Ribozyme; erythropoietin; granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ribozyme; erythropoietin; granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                        Score 12.2; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                         Sequence 17 BP; 8 A; 4 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                             Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hammerhead ribozyme substrate #1336.
                                                                                                                                                                                            Claim 4; Page 107; 164pp; English.
                                                                                                                                                                                                                                                                                                                          ;
                                                                                                                                                                                                                                                                                                                                            881
                                                                         11-APR-2000; 2000WO-US009721.
                                                                                           99US-0129390P
                                                                                                                            Pavco P,
                                                                                                                                                                                                                                                                                                         4.2%;
                                                                                                                                                                                                                                                                                                                                                           AGTIGGAAGATTITICI 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-APR-2000; 2000WO-US009721.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pavco P,
                                                                                                          (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                         865 AGTIGGAACACTITCCT
                                                                                                                                                                                                                                                                                                                                                                                                   AAF03041 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                          Conservative
        interferon alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               interferon alpha; ss.
                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                            WPI; 2000-647423/62
                                                                                                                            Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-647423/62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zwick M,
                                        WO200061729-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200061729-A2
                         Homo sapiens.
                                                                                           12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-APR-1999;
                                                         19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                     16-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-OCT-2000
                                                                                                                           Blatt L,
                                                                                                                                                                                                                                                                                                                                                          17
                                                                                                                                                                                                                                                                                                                                                                                                                    AAF03041;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                            AAF03041/c
셤
                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

```
ö
                                                                                                                                                                                                                                 ō
                                                                                                                    The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP)
Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                 Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production erythropoietin, granulocyte colony stimulating factor protein and
                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleotide sequence of triplex forming oligonucleotide for Hprt gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA-modifying molecule; DNA repair-deficient cell; transgenic cell; disease model; Hprt gene; triplex forming oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /*tag= b
/note= "each residue has a 2'-0 methyl sugar
                                                                                                                                                                                                                                                                                                                                             Score 12.2; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       'note= "psoralen attached by a C6-linker"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
"methylated at 5' position"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        position"
                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 4 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      position'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       d
"methylated at 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   c
"methylated at 5'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     e
"methylated at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                             Claim 37; Page 86; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              *tag= f
note= "thioated
                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                          932 CCTCCAGAGAATTTTAC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-MAR-2001; 2001WO-US009218.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modification'
                                                                                                                                                                                                                                                                                                                                             ch 4.2%;
l Similarity 82.4%;
14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 cerceadadargiae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAI65850 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    . .17
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag=
/note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              *tag=
                                                                                                                                                                                                                                                                interferon alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200173001-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 nodified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AA165850;
```

WPI; 2001-496922/54

```
(USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                Fattaey AR, Jarvis T, Mcswiggen J,
       Majumdar A;
                                                                                                                                                 Homo sapiens
                                                                                                                               09-OCT-2001
                                                                                                                                                           09-AUG-2001
       Seidman MM,
                                                                                                                           AAH95805;
                                                                                                                                          Human;
                                                                                                                 RESULT 458
                                                                                                                   AAH95805/c
                                                                                                                         qq
                                                                                                     à
```

```
The specification describes a method for modifying a nucleotide sequence in the genome of a cell. The method comprises providing a cell and a DNA-modifying molecule, manipulating the cell to generate a synchronized cell and contracting the synchronized cell with the DNA-modifying molecule and contracting the synchronized cell with the DNA-modifying molecule under conditions such that a modification in the nucleotide sequence is produced. The method is useful for modifying nucleotide sequence is produced. The method is useful for modifying nucleotide sequence is genome of a human or non-human cell including a fertilized egg cell from c an animal such as sheep, pig, rabbit, cattle and a mouse cell such as blastomere, eight-cell embryo cell, blastocoele, midgestation embryo cell cand embryonic stem cell. The cell is preferably DNA repar-deficient. The method is useful for introducing a modification into the genome of a cell for determining the effect of the modification on the cell. The method generates transgenic cells and animals useful as models for diseases, and comparates transgenic agents. The method also facilitates targeted for eccombination for producing gene knockout organisms and/or replacement of detective genes with non-defective genes. Further the method is useful for determining the function of a gene of unknown function. AAI65848-49 represent target sequences, derived from exon 4 and exon 5 of the chinese hammater Hprt gene. The sequence is modified using the method of the invention by AAI65850-54, which represent triplex forming
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                        Modifying nucleotide sequence, including recombination of genes in (non-)human cell, comprises introducing DNA-modifying molecule into cell cycle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 0 A; 4 C; 0 G; 13 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human Chkl ribozyme substrate SEQ ID NO: 1230
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                            Example 2; Fig 1; 67pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  826 IGIGICICITITICITCT 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAH95805 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-FEB-2001; 2001WO-US003504.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-FEB-2000; 2000US-0179983P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rrrcrerrrrrrrrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-) RIBOZYME PHARM INC
(FATT/) FATTAEY A R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 82.4
Marches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RNA cleavage; cancer; ss.
WPI; 2001-616491/71
                                                                                                                                                             synchronized cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oligonucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200157206-A2.
```

Holman PS;

Booher RN,

```
Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; DD20; neurite growth inhibitor gene; NGG0; hammerhead ribozyme; DNAzyme; nD20; neurite growth inhibitor gene; NGG0; hammerhead ribozyme; hozyme; nozyme; G-cleaver; almberzyme; zinzyme; lymphoma; neu-Hodgkin's lymphoma; NHL; lymphoma; leukaemia; human immunodeficiency virus; HTV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopenenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; cerebroterapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                     The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chk1) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chk1 levels, including cancer. The present sequence is an oligonucleotide described in the exemplification of the invention
                                          Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense
                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                            4.2%; Score 12.2; DB 1; Length 17; 12.4%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                         Sequence 17 BP; 4 A; 2 C; 8 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chowrira BM;
                                                                                                                        Claim 4; Page 89; 115pp; English
                                                                                                                                                                                                                                                                                                                                                                                                       802 GCTCTCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABK02617 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                               82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                            17 GCTCTCCTCCACTACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human NOGO Amberzyme #289.
                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLATT L.
MCSWIGGEN J.
CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-607195/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABK02617;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BLAT/) E
(MCSW/) N
(CHOW/) C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAKAKA KARARAKA KARARAKA KARAKA K
g
                                                                                                                                                                                                                                                                                                                                                                                                           à
```

ô

rng.res

09-FEB-2001; 2001WO-US004273.

WO200159103-A2. L6-AUG-2001

Synthetic.

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P.

(RIBO-) RIBOZYME PHARM INC.

BLATT L.

(BLAT/) (MCSW/) CHOM/)

Sequence 17 BP; 9 A; 2 C; 4 G; 0 T; 2 U; 0 Other;

Gaps .; 0 4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; Ive 0; Mismatches 3; Indels 82.48; 14; Conservative Local Similarity Query Match Matches

0;

889 ACTIACTICICAGCITC 905 AGTITITICICAGCITC 17

à g ABK01137 standard; RNA; 17 BP

RESULT 460

12-MAR-2002 (first entry) ABK01137;

Human NOGO Inozyme #407.

Human; 98; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic, neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin; a lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA, Alzheimer's disease; multiple sclerosis; Parkinson; s disease; aultiple sclerosis; Parkinson; s disease; ataxia; Huntington's disease; 

Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease. Homo sapiens

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGGO). The nucleic acids (e.g. a ribozyme or a regulates expression of a neurite growth inhibitor grow (or regulates expression of a neurite growth inhibitor grow (or a nucleic acids (e.g. a ribozyme or possessing an WCH morif), a G-cleaver (cleaving RNA with a NRT motif) proposessing an NCH morif), a G-cleaver (cleaving RNA with a NRT motif) proposes in amberzyme (cleaving RNA with a NRT worlf) propose (cleaving RNA with a NRA triple!), a zinzyme (cleaving RNA with a VRY motif). The CD20-targetting nucleic acid is used to cleave RNA of the x GYZ motif). The CD20-targetting nucleic acid may be used to the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to cleave RNA of the NOGO gene in the Hodgkin's lymphona (MRL), bulky low-grade or follicular NHL, lymphoraty (L), immunocytoma (IMC), small B-cell lymphona, to NOGO expression of a divalent cation that is preferably MG-24. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the NOGO. The treatment may further comprise the use of one or more nucleic acid may be contacted with a cell to reduce NOGO activity of the NOGO. The treatment may further comprise the use of one or more nucleic acid may be contacted with a cell to reduce NOGO activity of the NOGO. The treatment may further comprise the use of one or more nucleic acid may be contacted with a cell to reduce NOGO activity of the NOGO. The treatment may further comprise the use of one or more nucleic acid may be contacted with a cell to reduce NOGO activity of the NOGO. The treatment may further comprise the nucleic acid may be contacted with a cell to reduce NOGO activity of the NOGO. The treatment may further comprise the nodulati constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury. Claim 88; Page 137; 200pp; English

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and

Claim 88; Page 84; 200pp; English. central nervous system injury.

Chowrira BM;

Mcswiggen J, CHOWRIRA B M. MCSWIGGEN J.

Blatt L,

WPI; 2001-607195/69.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (MOGO). The regulates expression of a neurite growth inhibitor gene (MOGO). The regulates expression of a neurite growth inhibitor gene (MOGO). The mucleic acids may be enzymatic nucleic acid cleaving a an RNA molecule possessing an NCH modify. A g-cleaver (cleaving RNA with a NYM motif), a G-cleaver (cleaving RNA with an NCH motif), a G-cleaver (cleaving RNA with a WOW motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably MG²7+. CC with a YGY motif). The CD20-targetting nucleic acid may be used to creat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-flodghin's lymphoma (MUH), bulky low-grade or follicular non-flodghin's lymphoma (MUH), bulky low-grade or follicular non-flowaemia, HLV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immunodeficiency virus) associated NHL, mantle-cell cleavened with a cell to reduce NOGO gene in the presence of a divalent cation that is preferably Mg²7+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO gene in the contacted may be contacted with a cell to reduce NOGO gene in the contacted may be contacted with a cell to reduce NOGO activity of the coll and treat a patient having a condition associated with the level of therapies. In particular, the NOGO-targetting nucleic acid may be used to contacted with a cell to reduce NOGO activity of the contacted with a cell to reduce NOGO activity of the contacted with a motified acid may be contacted with a cell to reduce NOGO activity of the contacted with a cell to reduce NOGO activity of the contacted with a coll cleave dementia, multiple sclerosis (MS), chemotherapy induced neuropathy, amycrophic lateral acid acid may be used to cate spatis with a

sequence is an inozyme of the invention

Sequence 17 BP; 4 A; 5 C; 3 G; 0 T; 5 U; 0 Other;

. 0 Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 5.5e+02; Matches 14; Conservative 0; Mismatches 3; Indels 3; Indels

0;

Gaps

d

ABK02464/c RESULT 461

to

rng.res

```
WPI; 2001-607195/69.
```

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; marcle-cell lymphoma; MCL; immunocytoma; IMC; immunocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy:induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease, ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease. Chowrira BM; 뮴. 11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 09-FEB-2001; 2001WO-US004273. 06-MAR-2000; 2000US-0187128P RIBOZYME PHARM INC. ABK02464 standard; RNA; 17 (first entry) Human NOGO Amberzyme #136. Blatt L, Mcswiggen J, CHOWRIRA B M. BLATT L. MCSWIGGEN J. WO200159103-A2. sapiens 12-MAR-2002 16-AUG-2001 Synthetic ABK02464; (RIBO-) (BLAT/) (CHOM/) (MCSM/) Homo

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving an RNA molecule DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule of cleaving RNA with an NGM riple!), a zinzyme (cleaving RNA with an NGM riple!), a zinzyme (cleaving RNA with a row of CD20 in the presence of a divalent cation that is preferably MG^2+.

CC puthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more the cell and treat a patient having a condition associated with the level of CD20. The treatment way further Comprise the use of one or more treat lymphoma, leuclain, bulky low-grade or follicular NHL, lymphocytic leukaemia, B-cell lymphoma, low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell cymphoma, immunocytoma (MCL), smanlow-grade or follicular NHL, lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO crargetting nucleic acid is used to cleave RNA of the NOGO gene in the crast a divalent cation that is preferably MG^2+. Furthermore, the cucleic acid may be contacted with a cell to reduce NOGO activity of the NOGO reland treat a patient may further comprise the use of one or more coll and treat a patient may further comprise the use of one or more Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury. Claim 88; Page 133; 200pp; English.

ô cerebroprotective, notropic; proprotective; antiparkinsonia; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; Mnxzwe; inozyme; Jnozyme; leukaemia; B-cell lymphoma; non-Hodgkin; lymphoma; NHL; lymphoma; leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; NCL; immunocytoma; INC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; benkentherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease. Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; therapies. In particular, the NOGO-targetting nucleic acid may be used treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present The invention relates to a nucleic acid molecule which down regulates Gaps ·. 4.2%; Score 12.2; DB 1; Length 17; 12.4%; Pred. No. 5.5e+02; 3; Indels sequence is an amberzyme molecule of the invention Sequence 17 BP; 8 A; 0 C; 6 G; 0 T; 3 U; 0 Other; 0; Mismatches Chowrira BM; Human NOGO Hammerhead Ribozyme #12. Claim 88; Page 66; 200pp; English. 905 central nervous system injury. ABK00012 standard; RNA; 17 BP 09-FEB-2001; 2001WO-US004273. 11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P. 17 ACTAACTICICITCIIC 1 Local Similarity 82.4%; RIBOZYME PHARM INC. 889 ACTTACTTCTCAGCTTC (first entry) 14; Conservative Blatt L, Mcswiggen J, (MCSW/) MCSWIGGEN J. (CHOW/) CHOWRIRA B M. WPI; 2001-607195/69. BLATT L. WO200159103-A2. Homo sapiens. 12-MAR-2002 16-AUG-2001. Synthetic. ABK00012; Query Match (RIBO-) (BLAT/) RESULT 462 Matches **ABK00012** 임 à

```
UNARAYME AN INDEXYME (and enocyttic nucleic acid cleaving a ma knwa molecule processessing an NCH motif), a G-cleaver (cleaving RNA with a NCH motif) pran an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a NGN triplet), a zinzyme (cleaving RNA with a C220 in the presence of a divalent cation that is preferably Mg^2+.

CC of CD20 in the presence of a divalent cation that is preferably Mg^2+.

CC the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more the real lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-clear lymphoma (NHL), bulky low-grade or follicular non-ledgkin's lymphoma (NHL), bulky low-grade or follicular non-cleakaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (INC), small B-cell lymphocytic lymphoma, composition and inflammatory arthropathy. The NOGO-cargetting nucleic acid may be used to cleave RNA of the NOGO gene in the conclacted with a cell to reduce NOGO activity of the coll and treat a patient having a condition associated with the level of the rapies. In particular, the NOGO-cargetting nucleic acid may be used to creat central nervous system (CNS) injury and cerebrovascular accident (CNA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (MS), chemotherapy-induced neuropathy, and/or other neurodegenerative disease correspondent control of NOGO expression. The present seamison's a harmachaed ribroryme of the neurodegenerative disease.
expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            states which respond to the modulation of NOGO exp sequence is a hammerhead ribozyme of the invention
```

; 0 Length 17; 3; Indels Sequence 17 BP; 4 A; 8 C; 1 G; 0 T; 4 U; 0 Other; 4.2%; Score 12.2; DB 1; 70.6%; Pred. No. 5.5e+02; rative 2; Mismatches 3; 918 ATCATCACCACCCT 934 1 AGCAUCAUCUCCACCCU 17 12; Conservative Best Local Similarity Query Match Matches à g

; 0

Gaps

ABL58272 standard; DNA; 17 BP 15-JUL-2002 (first entry) ABL58272; RESULT 463 

Rice OSEP3A gene fragment amplifying primer Pl.

Rice; cysteine proteinase; CysP; OsEP3A; plant; transgenic; promoter; aleurone; germination; nitrogen; senescence; PCR; primer; ss.

Oryza sativa

JS6388067-B1

10-JAN-2000; 2000US-00480017 12-FEB-2000; 2000CA-02296052

(SINI-) ACAD SINICA

Tong Yu S,

WPI; 2001-597345/68.

New rice cysteine proteinase gene promoter, useful in stress-induced regulation of heterologous proteins in plants or plant cells, or as

```
.;
0
                                                                                                   The invention relates to a new promoter derived from rice cysteine proteinse (CySP) gene (OsEP3A). The promoter directs the expression of a heterologous protein in the aleurone layer of transgenic rice seeds during germination and in cultured rice suspension cells under nitrogen starvation. The nucleic acids can be used as probes to isolate other promoters and/or genes whose expression is induced under stress or during senescence, and in stress-induced regulation of heterologous proteins in plants (including embryos, organs and seeds) or plant cells. The present sequence represents a PCR primer for amplifying a OSEP3A DNA fragment
probes for isolating promoters or genes whose expression stress-induced
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                Score 12.2; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 3 A; 10 C; 1 G; 3 T; 0 U; 0 Other;
                                                                  Disclosure; Col 6; 10pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 Arcecercácerez 17
                                                                                                                                                                                                                                                                                                                                                                4.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 921 ATCACCACCACCTCCA
                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 82.4°
Matches 14; Conservative
                      or during
  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

Cdc25; Cdc25 phosphatase; transcription; modulator; murine; CDc25A; exon; Murine Cdc25A intron 4/exon 5 splice junction sequence. intron;

AAF57366 standard; DNA; 17 BP.

RESULT 464 AAF57366/ (first entry)

11-JUN-2001

AAF57366;

Mus sp.

WO200120034-A2. 22-MAR-2001

L1-SEP-2000; 2000WO-US024838

99US-0153639P 13-SEP-1999; (BADI ) BASF 

Voss J, Timm J;

WPI; 2001-244825/25.

Assay for screening modulators of Cdc25 activity by using a recl having a recombinant Cdc25 phosphatase gene whose expression alters the transcription of a selected gene in the presence of a modulator.

Example 1; Page 15; 55pp; English.

The invention relates to a method of identifying a modulator of Cdc25 activity that comprises contacting a test cell having a recombinant Cdc25 phosphatase gene whose expression alters transcription of a selected gene, with a compound under conditions where recombinant Cdc25 phosphatase gene is expressed and alters the transcription of a selected gene as an indication of the compound being a modulator of Cdc25-mediated transcription. The method is useful for identifying modulators of Cdc25 activity. Sequences AAF57363-376 represent intron/exon splice junction sequences of the murine Cdc25A gene

Sequence 17 BP; 6 A; 3 C; 4 G; 4 T; 0 U; 0 Other;

g

```
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                           Human; genome-derived myosin-like protein 1; GDWLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                  Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7392.
                                                                                                                                                                                                                                            21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
04-OCT-2000; 2000GB-00024263.
30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US0006664.
30-JAN-2001; 2001WO-US0006667.
                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001, 2001WO-US000668
30-JAN-2001, 2001WO-US000669
30-JAN-2001, 2001WO-US000670
05-FEB-2001, 2001US-0266860P
                                                                                                                                                                                                      25-MAY-2001; 2001WO-US016981
           29-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AEOM-) AEOMICA INC.
                                                                                                                                                  WO200192524-A2.
                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                  26-MAY-2000;
                                                                                                                                                                              06-DEC-2001.
;
0
                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a rice cystein proteinase (OSEP3A, also known as CysP) gene promoter. The promoter directs the expression of a heterologous protein in the aleurone layer of transgenic rice seeds during germination and in cultured rice suspension cells under nitrogen starvation. The promoter nucleic acid sequence can be used as a probe to isolate other promoter and/or genes whose expression is induced under stress or during senescence, and in stress-induced regulation of heterologous proteins in plants (including embryos, organs and seeds) or plant cells. The present sequence represents a PCR primer for rice OSEP3A, which is used in an example from the present invention
                                                                                                                                                                                                                                                             Rice; cysteine proteinase; OsEP3A; CysP; enzyme; promoter; plant; aleurone layer; transgenic rice; seed; germination; nitrogen starvation; stress; senescence; stress-induced regulation; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New rice cysteine proteinase gene promoter, useful in stress-induced regulation of heterologous proteins in plants or plant cells, or as probes for isolating promoters or genes whose expression stress-induced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels
  Score 12.2; DB 1; Length 17;
Pred. No. 5.5e+02;
                              Indels
                                                                                                                                                                                                                                     Rice cysteine proteinase OSEP3A PCR primer SEQ ID NO:8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 3 A; 10 C; 1 G; 3 T; 0 U; 0 Other;
                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example; Page 9; 27pp; English.
                                                         901 GCTTCTGCGATCAGATT 917
                                                                                                                                                       ABN87370 standard; DNA; 17 BP
4.2%;
                                                                                                                                                                                                                                                                                                                                                                                                       12-FEB-2000; 2000CA-02296052
                                                                                                                                                                                                                                                                                                                                                                                                                                 12-FEB-2000; 2000CA-02296052
                                                                                     Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      82.4%;
                                                                                   17 gerrergerarcaagr
                                                                                                                                                                                                              (first entry)
Query Match
Best Local Similarity 82.4<sup>f</sup>
Matches 14, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       during senescence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-597345/68.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              (SINI-) ACAD SINICA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Yu S;
                                                                                                                                                                                                                                                                                                                        Oryza sativa.
                                                                                                                                                                                                                                                                                                                                                    CA2296052-A1.
                                                                                                                                                                                                              01-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                    ABNB7370;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rong W,
                                                                                                                             RESULT 465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or
```

Shannon ME;

Chen W,

Rank DR,

Hanzel DK,

```
The present invention describes a human genome-derived myosin-like protein i (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterises and quantify conclude initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be concent specifically of hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The closurate associated with the expression of hGDMLP-1 in particular haart of shorten associated with the expression of hGDMLP-1, in particular haart can skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence in the exemplification of the present invention. N.B. hGDMLP-1 sequence data for this patent did not form part of the printed continued in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.2%; Score 12.2; DB 1; Length 17; llarity 82.4%; Pred. No. 5.5e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 6 A; 4 C; 5 G; 2 T; 0 U; 0 Other;
Disclosure; SEQ ID NO 7392; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
```

921 ATCACCACCACCTCCA 937

Matches

ð g

Arcecercacecrea 17

ABN07400 standard; DNA; 17 BP.

RESULT 466

ABN07400/

ABN07400

a x a

```
Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                    Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:229.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hanzel DK, Rank DR,
     878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000664.
2001WO-US000665.
2001WO-US000666.
2001WO-US000667.
2001WO-US000668.
                                                                                                                                                                            BP.
                                              17 rccasrcscrrr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001WO-US000661.
2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US000663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0234687P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-FEB-2001; 2001US-0266860P
862 TCCAGTTGGAACACTTT
                                                                                                                                                                    ABN00237 standard; DNA; 17
                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                     29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-DEC-2001
                                                                                                                                                                                                                       ABN00237;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3u Y,
                                                                                                                                             ABN 00237

AZ A ABN 00237

AZ A ABN 00237

AZ A ABN 00237

AZ A ABN 003 ABN 00
ò
                                           g
```

used as immunogens to raise antibodies that specifically recognise hGDMLP uproteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced lasorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypoptides may be expressing the proteins. The hGDMLP-1 proteins or polypoptides may be expressing the proteins. The hGDMLP-1 proteins or polypoptides may be expressing the proteins. New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1. Disclosure; SEQ ID NO 229; 214pp; English.

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1

New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.

Disclosure; SEQ ID NO 6049; 214pp; English.

Shannon ME;

Chen W,

Rank DR,

Hanzel DK,

Penn SG,

Gu Y, Ji Y,

(AEOM-) AEOMICA INC.

Shannon ME;

Chen W,

WPI; 2002-179446/23.

ö The present sequence represents an oligomer used in the screening of the MSDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss. Gaps Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6049. 0; Score 12.2; DB 1; Length 17; Pred. No. 5.5e+02; Indels Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other; Mismatches ; 0 814 1 AAGAGCCTCCACCATC 17 BP 4.2%; 2001WO-US000662. 2001WO-US000663. 2001WO-US000664. 30-JAN-2001; 2001WO-US000667 30-JAN-2001; 2001WO-US000668 30-JAN-2001; 2001WO-US000669 30-JAN-2001; 2001WO-US000670 05-FEB-2001; 2001US-0266860P 2000US-0234687P 2000US-0236359P 2000GB-00024263. 2001WO-US000661 2001WO-US000665. 2001WO-US000666. 25-MAY-2001; 2001WO-US016981 798 AAGAGCTCTCCTCCAAC ABN06057 standard; DNA; 17 (first entry) 14; Conservative Best Local Similarity WO200192524-A2 30-JAN-2001; 2 30-JAN-2001; 2 30-JAN-2001; 2 30-JAN-2001; 2 30-JAN-2001; 2 30-JAN-2001; 2 Homo sapiens. 29-MAY-2002 27-SEP-2000; 04-OCT-2000; 30-JAN-2001; 26-MAY-2000; 21-SEP-2000; 06-DEC-2001 ABN06057; Query Match RESULT 468 ABN06057/c Matches 88888888 à

```
expressing the proteins. The hobMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hoDMLP used as immunogens to raise antibodies that specifically recognise hoDMLP to proteins, as standards in assays used to determine the concentration and/or amount specifically of hoDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therefore the properties as proteins having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polymuclectide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence in the exemplification of the present invention. N.B.

The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7664.
protein variants having desired phenotypic improvements, and for
                                                                                                                                                                                                                                                                                                                                ·;
                                                                                                                                                                                                                                                                                                 4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chen W,
                                                                                                                                                                                                                                                                     Sequence 17 BP; 7 A; 1 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rank DR,
                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hanzel DK,
                                                                                                                                                                                                                                                                                                                                  :0
                                                                                                                                                                                                                                                                                                                                                                   847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABN07672 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000665.
2001WO-US000666.
2001WO-US000667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000661.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001WO-US000668
2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                   17 CTCCTTTCTTCTCGAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0234687P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0236359P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001WO-US000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001US-0266860P
                                                                                                                                                                                                                                                                                                                                                                   831 CTCTTTTCTTCTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001,
30-JAN-2001,
30-JAN-2001,
30-JAN-2001,
30-JAN-2001,
30-JAN-2001,
30-JAN-2001,
30-JAN-2001,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001;
30-JAN-2001;
05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABN07672;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABN07672/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                $55555555555555%&
                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                q
```

New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,

· 0

Gaps

```
The present invention describes a human genome-derived myosin-like protein 1 (hgDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids in samples, as amplification substrates, to nucleic acids can be used as probes to detect, characterises and quantify convide initial substrates for the recombinant engineering of hGDMLP-1 proteins are available. The proteins of polypeptides may be expressing the proteins. The hGDMLP-1 proteins or polypeptides may be expressing the proteins. The hGDMLP-1 proteins or polypeptides may be capture specifically of hGDMLP-1 proteins, as specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP-1 proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as concentration and or amount specifically explains a protein of hGDMLP-1 may be used for diagnosing a production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The concentration and skeleral muscle disorders. hGDMLP-1 may be used for diagnosing a confine or production of the present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at this patent did not form part of the printed for the present approaches a sequence in the sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
specific biomolecule capture probes for surface-enhanced laser
                      desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8904.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     / Match 4.2%; Score 12.2; DB 1; Length 17; Local Similarity 82.4%; Pred. No. 5.5e+02; tes 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 7 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
                                                             SEQ ID NO 7664; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000664.
2001WO-US000665.
2001WO-US000666.
2001WO-US000667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2001WO-US00663.
30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             806 TCCTCCAACTCAGGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABN08912 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 rrcrccagcrcarggrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAY-2000;
21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-DEC-2001.
                                                                    Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABN08912;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 470
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABN08912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
```

ö

```
30-JAN-2001; 2001MO-US000669.
30-JAN-2001; 2001WO-US000670.
05-FEB-2001; 2001US-0266860P.
          (AEOM-) AEOMICA INC.
                                                                                                                                                                           WO200192524-A2.
                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                06-DEC-2001
                                                                                                                                            ABN08917;
               Gu Y,
                                                                                                                                  RESULT 471
                                                                                                                                    ABN08917
à
                                                                                                                         g
```

```
New polypeptide, for raising antibodies that recognize hGDWLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDWLP-1.
   Shannon ME;
   Chen W,
                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
  Rank DR,
                                                                                        Disclosure; SEQ ID NO 8904; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                            at ftp.wipo.int/pub/published_pct_sequence
 Hanzel DK,
Ji Y, Penn SG,
                     WPI; 2002-179446/23.
```

Gaps ., 4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels 82.4%; Query Match
Best Local Similarity 82.4°
Matches 14; Conservative

ö

704 CCAGCGAGTCCCAGGAG 720 1 cercesásrecesácias

ABN08917 standard; DNA; 17 BP

29-MAY-2002 (first entry)

Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss. Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8909.

25-MAY-2001; 2001WO-US016981.

26-MAY-2000; 2000US-0207456P

```
2001WO-US000661.
2001WO-US000662.
                        2001WO-US000663.
2001WO-US000664.
                                           30-JAN-2001; 2001WO-US000667
30-JAN-2001; 2001WO-US000668
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
          2000GB-00024263
                                  2001WO-US000665.
2001WO-US000666.
                                                               05-FEB-2001; 2001US-0266860P
                       30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
              30-JAN-2001;
30-JAN-2001;
                                       30-JAN-2001;
```

(AEOM-) AEOMICA INC.

Shannon ME; Chen W, Rank DR, Hanzel DK, Gu Y, Ji Y, Penn SG,

WPI; 2002-179446/23.

New polypeptide, for raising antibodies that recognize hGDWLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDWLP-1.

Disclosure; SEQ ID NO 8909; 214pp; English

at ftp.wipo.int/pub/published_pct_sequence

Sequence 17 BP; 4 A; 5 C; 7 G; 1 T; 0 U; 0 Other;

Gaps ·, 4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels 82.48; 14; Conservative Query Match Best Local Similarity Matches

ö

ò 셤

ABN01621 standard; DNA; 17 BP. (first entry) 29-MAY-2002 ABN01621; ABN0162: 

472

RESULT

Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:1613.

Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;

ABN08916 standard; DNA; 17 BP.

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLD-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLD-1 can be used in gene therapy and vaccine production. The hGDMLD-1 can be used in gene therapy and vaccine production. The hGDMLD-1 can uncleic acids in samples, to detect, characterise and quantify compared initial substrates for the recombinant engineering of hGDMLD-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLD-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 capture probes for surface-enhanced laser description ionication, and or amount specifically of hGDMLD-proteins, as specific biomolecule capture probes for surface-enhanced laser description ionication, as the proplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The concentration of skeleral muscle disorders, hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart of skeleral muscle disorders, hGDMLP-1 is localised to diromosome 22.

The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at fig. at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Shannon ME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 8 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hanzel DK, Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; SEQ ID NO 1613; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000668.
2001WO-US000669.
                                                                                                                                                                                                                                                                                                                         2001WO-US000663.
2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000666.
2001WO-US000667.
                                                                                                                                                                                                                         2000US-0234687P.
2000US-0236359P.
2000GB-00024263
                                                                                                                                                                                                                                                                                   2001WO-US000661
2001WO-US000662
                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000670
2001US-0266860P
                                                                                                                                                              25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AEOM-) AEOMICA INC.
                                                                                   WO200192524-A2
                                                                                                                                                                                                                                                                                                                       30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
30-JAN-2001;
05-FEB-2001;
                                           Homo sapiens.
                                                                                                                                                                                                                                                                                     30-JAN-2001;
                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                           21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                  04-OCT-2000;
                                                                                                                                                                                                        26-MAY-2000;
                                                                                                                           06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gu Y,
```

```
Gaps
                                      ;
0
4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ive 0; Mismatches 3; Indels
                       82.4%;
     Query Match
Best Local Similarity 82.4
Matches 14; Conservative
```

.; 0

TACGCAAGAAGAGCCAA 962 TACGGAAGGAGAACCAA 17 946 Н

à d

```
Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                           Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8908.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001; 2001WO-US000668
30-JAN-2001; 2001WO-US000669
30-JAN-2001; 2001WO-US000670
05-FEB-2001; 2001US-0266860P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0234687P
2000US-0236359P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000661
                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                              WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gu Y, Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-SEP-2000;
27-SEP-2000;
                                                                                                                                  29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-DEC-2001.
                                                                                 ABN08916;
ABN08916

ABN08916

ABN08916

ACX

XXX

XXX

ABN0

ABN08916

ABN08
```

New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1. WPI; 2002-179446/23.

Disclosure; SEQ ID NO 8908; 214pp; English.

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polymucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify concleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to protein variants having desired phenotypic improvements, and for concessing the proteins. The hGDMLP-1 proteins or polypeptides may be expressing the proteins. The hGDMLP-1 proteins or polypeptides may be concentrated as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as specifically recognise hGDMLP-1 proteins, as specifically of hGDMLP proteins, as specific biomolecule and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as concentration and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The concordisted with the expression of hGDMLP-1, in particular heart of misorders associated with the expression of hGDMLP-1, in particular heart can skeletal muscle disorders, hGDMLP-1 is localised to chromosome 22.

The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence of this patent did not form part of the printed capture. The sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed sequence data for this patent did not form part of the printed the ferminal part of the printed sequence and patent did not form part of the printed sequence in the specification of the present invention. N B.

The sequence data for this patent did not form part of the printed sequence in the sequence of the present directly from N B.

Sequence 17 BP; 3 A; 6 C; 7 G; 1 T; 0 U; 0 Other;

0

Gaps

```
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
                                                                                                                                                                                 Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart, muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                               Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:661.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Shannon ME;
                      ;
0
  Length 17;
                    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Chen W,
Score 12.2; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hanzel DK,
                                      724
                                                 1 CGAGTCCCAGCAGCGGG 17
                                                                                                       ABN00669 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                       2000US-0236359P.
2000GB-00024263.
2001WO-US000661.
                                                                                                                                                                                                                                                                                 25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                                                                                                                                                                     2001WO-US000662.
2001WO-US000663.
                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000667.
                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000668.
                                                                                                                                                                                                                                                                                                              2000US-0234687P
                                                                                                                                                                                                                                                                                                                                                                       2001WO-US000664
                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000670
2001US-0266860P
         82.4%;
                                                                                                                                                                                                                                                                                                                                                                                2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                      2001WO-US000669
                                     708 CGAGTCCCAGGAGAGTG
                                                                                                                                              (first entry)
                  14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-179446/23.
         Best Local Similarity
                                                                                                                                                                                                                                           WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                      27-SEP-2000;
                                                                                                                                             29-MAY-2002
                                                                                                                                                                                                                                                                                                                                         30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001;
                                                                                                                                                                                                                                                                                                    26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                        05-FEB-2001;
                                                                                                                                                                                                                                                             06-DEC-2001
Query Match
                                                                                                                         ABN00669
                                                                                          Matches
                                    à
                                                   g
```

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polymucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1

Disclosure; SEQ ID NO 661; 214pp; English

```
ò
production, and in vaccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New polypeptide, for raising antibodies that recognize hGDWLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDWLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                             Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7390.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shannon ME;
                                                                                                                                                                                                                .
0
                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Chen W,
                                                                                                                                              Sequence 17 BP; 6 A; 6 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                              Score 12.2; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 7390; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hanzel DK,
                                                                                                                                                                                                                                         831
                                                                                                                                                                                                                                                                                                                                         ABN07398 standard; DNA; 17 BP.
                                                                                                                                                                              4.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001WO-US000668.
2001WO-US000669.
2001WO-US000670.
2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0234687P.
2000US-0236359P.
2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001; 2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001; 2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001; 2001WO-US000661
                                                                                                                                                                                                                                                          17 TCTGGCTTGGCTGAGTC
                                                                                                                                                                                                                                      815 TCAGGGTTGGCTGTGTC
                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                            Local Similarity 82.4
les 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gu Y, Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                 29-MAY-2002
                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                      ABN07398;
                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                           ABN07398/
   88888888888888
                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                셤
```

WPI; 2002-179446/23.

```
province initial subsidiates for the recommentation in normalization variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP consists and for amount specifically of hGDMLP proteins, as specific blomolecule and/or amount specifically of hGDMLP proteins, as specific blomolecule capture probes for surface-enhanced laser desorption ionisation, as the represent in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B.

The sequence data for this patient did not form part of the printed consisting in the streen in the sequence form the patient did not form part of the printed consisting in the streen in the consisting in the consistency in 
                      mucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hanzel DK, Rank DR, Chen W, Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6048.
can be used in gene therapy and vaccine production. The hGDMLP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 5.5e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           864 CAGTIGGAACACTIICC 880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; 2001WO-US000668.
; 2001WO-US000669.
; 2001WO-US000670.
; 2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABN06056 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000663.
2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001WO-US000667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 cágraddarcccriricc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000US-0207456P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0234687P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0236359P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001WO-US000661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US000666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80-JAN-2001;
80-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABN06056;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABN06056/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       $$$$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
```

ö

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polymucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The protein associated with the expression of hGDMLP-1 in particular heart of sorder associated with the expression of hGDMLP-1, in particular heart can skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence in the exemplification of the present invention. N.B. CR hGDMLP-1 sequence of this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                               New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7393.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.2%; Score 12.2; DB 1; Length 17; 12.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 7 A; 2 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                       Disclosure; SEQ ID NO 6048; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    832 TCTTTTCTTCTGAAG 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000661.
2001WO-US000662.
2001WO-US000663.
2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABN07401 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 TCCTTTCTTCTCGAAAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0207456P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 82.4°
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-DEC-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABN07401;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABN07401/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
```

; 0

25-MAY-2001; 2001WO-US016981.

27-SEP-2000; 04-OCT-2000;

30-JAN-2001; 2001WO-US000661. 30-JAN-2001; 2001WO-US000662. 30-JAN-2001; 2001WO-US000663. 30-JAN-2001; 2001WO-US000664. 30-JAN-2001; 2001WO-US000666. 30-JAN-2001; 2001WO-US000666. 30-JAN-2001; 2001WO-US000667.

2001WO-US000670

30-JAN-2001;

05-FEB-2001; 2001US-0266860P

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polymuclectide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 conclusion acids can be used as probes to detect, characterise and quantify hGDMLP-1 mucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be corporated as immunogens to raise antibodies that specifically recognise hGDMLP-2 proteins, as specific and for and/or amount specifically of hGDMLP-1 proteins, as specific biomolecule and/or amount specifically of hGDMLP-1 proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polymuclectide sequences encoding having specific deficiency in hGDMLP-1 can associated with the expression of hGDMLP-1, in particular heart can skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed sequence in the exemplification of the present invention. N.B. Specification, but was obtained in electronic format directly from WIPO at fib. who, int volus as obtained and per semmence.
                                                                                                                                                                                                                                                                                                                                                    New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                            Shannon ME;
                                                                                                                                                                                                                                                          Rank DR, Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure, SEQ ID NO 7393, 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                          Hanzel DK,
                                       30-JAN-2001; 2001WO-US000667;
30-JAN-2001; 2001WO-US000668
30-JAN-2001; 2001WO-US000669
30-JAN-2001; 2001WO-US000670
05-FRB-2001; 2001US-0266860P.
                       2001WO-US000666
                                                                                                                                                                                                                                                       Penn SG,
                                                                                                                                                                                                                                                                                                       WPI; 2002-179446/23.
                                                                                                                                                                                                  (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                    Ji Y,
                     30-JAN-2001;
                                                                                                                                                                                                                                                    Gu Y,
```

```
4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ive 0; Mismatches 3; Indels
                                                                861 CTCCAGTTGGAACACTT 877
                                                                                              crccagregarcctr 1
                       82.48;
Query Match
Best Local Similarity 82.4
Matches 14; Conservative
                                                                                              17
                                                                                       qq
                                                                  ð
```

. 0

Gaps

..

ABN06109 standard; DNA; 17 BP (first entry) 29-MAY-2002 ABN06109; RESULT 478 

Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6101.

Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1, heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.

Homo sapiens

WO200192524-A2

06-DEC-2001

The present invention describes a human genome-derived myosin-like

1 can be used in gene therapy and vaccine production. The hGDMLP-1

2 can be used in gene therapy and vaccine production. The hGDMLP-1

2 nucleic acids can be used as probes to detect, characterise and quantify

3 nucleic acids can be used as probes to detect, characterise and quantify

4 nucleic acids in samples, as amplification substrates, to

5 hGDMLP-1 nucleic acids in samples, as amplification substrates, to

6 hGDMLP-1 nucleic acids in samples, as amplification substrates, to

7 provide initial substrates for the recombinant engineering of hGDMLP-1

8 protein variants having desired phenotypic improvements, and for

8 expressing the proteins. The hGDMLP-1 proteins or polypeptides may be

8 cand/or amount specifically of hGDMLP-1 proteins, as specific biomolecule

9 and/or amount specifically of hGDMLP proteins, as specific biomolecule

9 capture probes for surface-enhanced laser desorption ionisation, as

9 character probes for surface-enhanced laser desorption ionisation, as

9 characterises encoding hGDMLP-1 may be used for diagnosing a

9 clymuclostide sequences encoding hGDMLP-1 may be used for diagnosing a

9 clisorder associated with the expression of hGDMLP-1, in particular heart

9 and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

1 proteins but was obtained in electronic format directly from WIPO

1 proteins but was obtained in electronic format directly from WIPO New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1. Shannon ME; Chen W, Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other; Rank DR, Disclosure, SEQ ID NO 6101, 214pp; English. ftp.wipo.int/pub/published_pct_sequence Hanzel DK, Gu Y, Ji Y, Penn SG, WPI; 2002-179446/23. (AEOM-) AEOMICA INC. 

Ouery Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 5.5e+02; 3; Indels 0; Mismatches 14; Conservative Matches

779 GGGCAGCCCCTCTGGTG 795

ò 임

; 0

Gaps

0;

1 GAGCAGCCCCTCCAGTG 17 ABN07399 standard; DNA; 17 BP ABN07399; RESULT 479 ABN07399/c
ID ABN0
XX
AC ABN0
XX
DT 29-M

29-MAY-2002 (first entry)

Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1, heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss. 25-MAY-2001; 2001WO-US016981 (AEOM-) AEOMICA INC. WO200192524-A2. 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 26-MAY-2000; 21-SEP-2000; 27-SEP-2000; 04-OCT-2000; Homo sapiens. 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 05-FEB-2001; 36-DEC-2001 Gu Y, 

2001WO-US000669. 2001WO-US000669. 2001WO-US000670. 2001WO-US000666. 2001WO-US000667.

2001US-0266860P

2001WO-US000664

2001WO-US000662 2001WO-US000663 2001WO-US000665

2000US-0236359P 2000GB-00024263

2001WO-US000661

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids in samples, as amplification substrates, to nucleic acids in samples, as amplification substrates, to hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines of replacement therapy. The production, and in vaccines of replacement therapy. The concentration disorder associated with the expression of hGDMLP-1, in particular heart on skeleral muscle disorders. hGDMLP-1 may be used for diagnosing a disorder associated with the expression of the present invention. N.B. CThe present invention. N.B. The sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed of the rinted of the result of the printed of the rinted of the result of the present did not form part of the present directly from MIPO and the result of the present did not form part of the present directly from MIPO and successive did not form part of the present directly from MIPO and the present did not form part of the present directly may be used the present directly may be used the present directly from MIPO and the present directly may be used the present direc New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1. Shannon ME; Chen W, Rank DR, Disclosure, SEQ ID NO 7391; 214pp; English. at ftp.wipo.int/pub/published_pct_sequence Hanzel DK, Ji Y, Penn SG, WPI; 2002-179446/23.

Sequence 17 BP; 5 A; 4 C; 6 G; 2 T; 0 U; 0 Other;

Gaps . 0 4.2%; Score 12.2; DB 1; Length 17; 12.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels Query Match
Best Local Similarity 82.4%;
Matches 14; Conservative

ö

17 CCAGTGGGATCCCTTTC

g

Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7391.

RESULT

Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss. Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:662 30-JAN-2001; 2001WO-US000661. 30-JAN-2001; 2001WO-US000662. 30-JAN-2001; 2001WO-US000663. 30-JAN-2001; 2001WO-US000666. 30-JAN-2001; 2001WO-US000665. 30-JAN-2001; 2001WO-US0006665. ABN00670 standard; DNA; 17 BP. 2001WO-US000668. 2001WO-US000670. 2001US-0266860P. 2001WO-US000669 25-MAY-2001; 2001WO-US016981 2000US-0236359P 2000GB-00024263 (first entry) WO200192524-A2. 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; Homo sapiens 26-MAY-2000; 21-SEP-2000; 27-SEP-2000; 04-OCT-2000; 29-MAY-2002 06-DEC-2001 ABN00670; ABN00670, 

Shannon ME; Chen W, Rank DR, Hanzel DK, Gu Y, Ji Y, Penn SG, WPI; 2002-179446/23.

(AEOM-) AEOMICA INC

New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.

Disclosure; SEQ ID NO 662; 214pp; English.

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates (to hGDMLP-1 nucleic acids in samples, as amplification substrates to the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins The hGDMLP-1 proteins or polypeptides may be used as immunospens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific blomolecule capture probes for surface-enhanced laser description ionisation, as and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The concentration and skeletal muscle disorders, hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders, hGDMLP-1 is localised to chromosome 22.

The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence data for this patent did not form part of the printed

863 CCAGTIGGAACACTIIC 879

ö

```
nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1
specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                           Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shannon ME;
                                                                                                                                                                                                                                                                                                                  Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:226.
                                                                                                      0;
                                                                           Length 17;
                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chen W,
                                        Sequence 17 BP; 6 A; 6 C; 4 G; 1 T; 0 U; 0 Other;
                                                                       Score 12.2; DB 1;
Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rank DR,
                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; SEQ ID NO 226; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hanzel DK,
                                                                                                     ..
                                                                                                                              814 CTCAGGGTTGGCTGTGT 830
                                                                                                                                                                                                                               ABN00234 standard; DNA; 17 BP
                                                                        4.2%;
                                                                                                                                                          Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000662.
2001WO-US000663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000665.
2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000GB-00024263.
2001WO-US000661.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US000670.
2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001WO-US000667
                                                                                                                                                         crcrcccrrcccrcacr
                                                                                                                                                                                                                                                                                      29-MAY-2002 (first entry)
                                                                                                   14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-179446/23.
                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-DEC-2001
                                                                                                                                                         17
                                                                                                                                                                                                                                                           ABN00234;
                                                                        Query Match
                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gu Y,
                                                                                                                                                                                                  RESULT 481
                                                                                                                                                                                                                ABN00234
  S X X &
                                                                                                                                                       q
                                                                                                                                                                                                                             à
```

```
.
-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The dispolation of the polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence data for this patent did not form part of the printed the sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New polypeptide, for raising antibodies that recognize hGDWLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDWLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shannon ME;
                                                                                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                                                                                                               4.2%; Score 12.2; DB 1; Length 17; 12.4%; Pred. No. 5.5e+02; v.e 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chen W,
                                                                                                                                                                                                                                 Sequence 17 BP; 5 A; 8 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hanzel DK,
                                                                                                                                                                                                                                                                                                                             795 GCCAAGACCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                  673/c
ABN07673 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000663.

2001WO-US000663.

2001WO-US000664.

2001WO-US000665.

2001WO-US000665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0234687P
2000US-0236359P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000GB-00024263
2001WO-US000661
                                                                                                                                                                                                                                                                            82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000668
2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001US-0266860P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                               14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-DEC-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABN07673;
                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 482
                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                          ABN07673/
                                                                                                                                                                                                                                                                                                                                                                                                                                                        $$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                           q
```

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLD-1). The protein and polynucleotide sequences of hGDMLD-1 can be used in gene therapy and vaccine production. The hGDMLD-1 nucleic acids in samples, as amplification substrates, to nucleic acids can be used as probes to detect, characterise and quantify compared initial substrates for the recombinant engineering of hGDMLD-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines of hGDMLP-1 is localised to chromosome 22.

The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. CT the sequence data for this patent aid not form part of the printed contractive the contractive of the printed contractive of the contractive of the printed contractive of the contractive of the printed contractive of the contractive of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match

4.2%; Score 12.2; DB 1; Length 17;
Best Local Similarity 82.4%; Pred. No. 5.5e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 6 A; 3 C; 6 G; 2 T; 0 U; 0 Other;
Disclosure; SEQ ID NO 7665; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    805 CTCCTCCAACTCAGGGT 821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABN07674 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001WO-US000664.
2001WO-US000665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US000670.
2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000US-0234687P.
2000US-0236359P.
2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000661.
2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               crrcrccagcrcarggr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001WO-US000667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABN07674;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABN07674/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \overset{\mathbf{a}}{\times}\overset{\mathbf{x}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{b}}{\circ}\overset{\mathbf{
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
```

·,

Gaps

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 mucleic acids can be used as probes to detect, characterises and quantify compared initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The disorders associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence in the exemplification of the present invention. N.B. the sequence data for this patent did not form part of the printed the specification, but was obtained in electronic format directly from WIPO New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1. Human, KTOMIa; KTOMI; kidney tumour overexpressed membrane; cytostatic; gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung; kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss. Gaps Shannon ME; .**;** Match 4.2%; Score 12.2; DB 1; Length 17; Local Similarity 82.4%; Pred. No. 5.5e+02; 3; Indels Chen W, Sequence 17 BP; 6 A; 3 C; 6 G; 2 T; 0 U; 0 Other; Rank DR, Human KTOM1a portion (ABQ63232) probe # 497. Disclosure; SEQ ID NO 7666; 214pp; English. 0; Mismatches at ftp.wipo.int/pub/published_pct_sequence Hanzel DK, 804 TCTCCTCCAACTCAGGG 820 2000US-0234687P. 2000US-0236359P. 2000GB-00024263. 2001WO-US000661. ABQ63784 standard; DNA; 17 BP Н 21-SEP-2001; 2001WO-US029656. 17 TCTTCTCCAGCTCATGG (first entry) 14; Conservative Penn SG, WPI; 2002-179446/23. (AEOM-) AEOMICA INC WO200224750-A2. 27-SEP-2000; 204-OCT-2000; 20-JAN-2001; 2 Homo sapiens. 20-AUG-2002 21-SEP-2000; Ji Y, 28-MAR-2002. ABQ63784; Query Match Gu Y, RESULT 484 ABQ63784/c Matches a ð

·.

```
New human kidney tumor overexpressed membrane (KTOMI) protein and nucleic acids encoding the protein, useful for treating subjects having defects in KTOMI which can manifest as cancer of the kidney, or as a disorder of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel isolated nucleic acid encoding human kTCM1 (kidney tumour overexpressed membrane) protein. The protein of the invention has cytostatic activity. The nucleotide may have a use in gene therapy. The KTCM1 nucleic acids may be used to diagnose, treat or compositions comprising the nucleic acids, proteins or antibodies may be used to treat subjects having defects in KTCM1 which can manifest as cancer of the kidney, as well as a disorder of liver, bone marrow, brain, heart, lung, kidney, as lessents a probe used in the invention to scan the nt 1-1001 portion of human KTCM1a (ABQ63232)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, KTOMla, KTOMl; kidney tumour overexpressed membrane; cytostatic; gene therapy; cancer; kidney, liver; bone marrow; brain; heart; lung; kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.2%; Score 12.2; DB 1; Length 17;
82.4%; Pred. No. 5.5e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 4 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human KTOM1a portion (ABQ63232) probe # 46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; Page 222; 418pp; English.
30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  775 CTGAGGGCAGCCCCTCT 791
                                                                                                                                                                                                                                                                                            23-MAY-2001; 2001US-00864761.
28-AUG-2001; 2001US-0315676P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              craagaggagcreerer 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABQ63333 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-AUG-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       e.g., liver or bone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-479509/51.
                                                                                                                                                                                                                                                                                                                                                                                          (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
les 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200224750-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABQ63333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABQ63333
      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HANGE STATE OF THE STATE OF THE
```

```
New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention relates to a novel isolated nucleic acid encoding human KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the invention has cytostatic activity. The nucleotide may have a use in gene therapy. The KTOM1 nucleic acids may be used to diagnose, treat or compositions comprising the nucleic acids, proteins or antibodies may be used to treat subjects having the nucleic acids, proteins or antibodies may be used to treat subjects having defects in KTOM1 which can manifest as cancer of the kidney, as well as a disorder of liver, bone marrow, brain, heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta function. The sequence represents a probe used in the invention to scan the nt 1-1001 portion of human KTOM1a (ABQ631212)
                                                                                                                                                                                                                                                                                                                                               acids encoding the protein, useful for treating subjects having defects in KTOMI which can manifest as cancer of the kidney, or as a disorder of e.g., liver or bone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human, KTOMla; KTOMl; kidney tumour overexpressed membrane; cytostatic; gene therapy; cancer; kidney; liver; bone marxow; brain; heart; lung; kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 1 A; 9 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human KTOM1a portion (ABQ63232) probe # 465.
                                                                                                                                                                                                                                                                                                                                                                                                                   Example 2; Page 163; 418pp; English.
          30-JAN-2001; 2001W0-US000662.
30-JAN-2001; 2001W0-US000663.
30-JAN-2001; 2001W0-US000664.
30-JAN-2001; 2001W0-US000665.
30-JAN-2001; 2001W0-US000666.
30-JAN-2001; 2001W0-US000668.
30-JAN-2001; 2001W0-US000669.
30-JAN-2001; 2001W0-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 751 CCCAGGGTCCCTAGGCC 767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABQ63752 standard; DNA; 17 BP
                                                                                                                                                                      23-MAY-2001; 2001US-00864761
28-AUG-2001; 2001US-0315676P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-SEP-2001; 2001WO-US029656.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 cccascercccarescc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 82.4
les 14; Conservative
                                                                                                                                                                                                                            (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                               WPI; 2002-479509/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200224750-A2
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABQ63752;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                              Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 486
ABQ63752/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
   g
```

ö

Gaps ;

21-SEP-2000; 2000US-0234687P. 27-SEP-2000; 2000US-0236359P. 04-OCT-2000; 2000GB-00024263.

21-SEP-2001; 2001WO-US029656.

0;

```
Zhan J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABV80323
NA THE REAL MANAGEMENT OF THE PROPERTY OF THE 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                          New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic acids encoding the protein, useful for treating subjects having defects in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KTOMI (kidney tumour overexpressed membrane) protein. The protein of the invention has cytostatic activity. The nucleotide may have a use in gene therapy. The KTOMI nucleic acids may be used to diagnose, treat or monitor a disease caused by altered expression of human KTOMI.

Compositions comprising the nucleic acids, proteins or antibodies may be used to treat subjects having defects in KTOMI which can manifest as cancer of the kidney, as well as a disorder of liver, bone marrow, brain, heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta function. The sequence represents a probe used in the invention to scan the nt 1-1001 portion of human KTOMIa (ABQ63232)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel isolated nucleic acid encoding human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 4 A; 5 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human HTPL scanning oligonucleotide SEQ ID 455.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; Page 218; 418pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  805 CTCCTCCAACTCAGGGT 821
                         2001WO-US000661.
2001WO-US000662.
2001WO-US000663.
2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABV79209 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-JAN-2002; 2002EP-60001167.
                                                                                                                                                       30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
                                                                                                           2001WO-US000665.
2001WO-US000666
                                                                                                                                                                                                                       2001WO-US000670
                                                                                                                                                                                                                                              23-MAY-2001; 2001US-00864761
28-AUG-2001; 2001US-0315676P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 CTGCTGCAAATCAGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-JAN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-479509/51.
                                                                                                                                                                                                                                                                                                                (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            e.g., liver or bone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                    30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
                                             30-JAN-2001;
                                                                                                                                                                                                                         30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-AUG-2002.
  04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABV79209;
                                                                                                                                                                                                                                                                                                                                                              Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABV79209,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
    ð
```

```
The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human such and an answer of the such as the such and an and such as the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           clinically useful diagnostic markers and potental therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 2 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human HTPL scanning oligonucleotide SEQ ID 1569.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2; Page 123; 718pp; English.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000669.
23-MAY-2001; 2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               777 GAGGGCAGCCCCTCTGG 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             琚.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 GACAGCAGCCCTCTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABV80323 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-676582/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-JAN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EP1229046-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-AUG-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABV80323;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
```

. 0

```
The present invention relates to human testis expressed Patched like

Drotein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL

Chas two isoforms, with a few single base pair differences between the

two. One of the single base pair changes introduces a premature stop

codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

shares an overall structure organisation with the Patched protein. The

shared structural features strongly imply that HTPL plays a role similar

contains an overall structure organisation with the Patched protein. The

shared structural features strongly imply that HTPL plays a role similar

contains a potential tumour suppressor. HTPL is

mapped to human chromosome lDD12.1. HTPL and its coding sequence are

useful for diagnosing a disorder caused by mutation in HTPL, and in

therapy and manufacture of a medicament for treatment or prevention of

such disorder associated with decreased expression or activity of human

HTPL. Such disorders include disorders of testis, or adrenal, adult and

foetal liver, bone marrow, brain, kidney, lung, placenta, prostate,

skeletal muscle or colon function. HTPL proteins and nucleic acids are

clinically useful diagnostic markers and potenial therapeutic agents for

male infertility and cancer. The present oligonucleotide was used in an

example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                       Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 6 A; 7 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human NEDD-1 scanning 17-mer sequence #139.
                                                                                                                                                                                                                                                                                                                                                                                Example 2; Page 269; 718pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            916 TTATCATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                    2001WO-US000664.
2001WO-US000665.
2001WO-US000667.
                                                                                                         30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
23-MAY-2001; 2001US-0064761.
09-OCT-2001; 2001US-0327898P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NEDD-1; cytostatic; human; ss
 28-JAN-2002; 2002EP-00001167
                                     2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-SEP-2001; 2001WO-US030287.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABN97629 standard; cDNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTACAATCACCACCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                  (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                      WPI; 2002-676582/73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200226818-A2
                                                    30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                   30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABN97629
                                                                                                                                                                                                                                    Zhan J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 489
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

```
This invention relates to an isolated polynucleotide encoding human NEDD-1, which is cytostatic in its action. The polynucleotide is useful for diagnosing diseases caused by mutation in human NEDD-1, and for diagnosing or monitoring diseases caused by altered expression of human NEDD-1. Fragments of NEDD-1 are useful as hybridisation probes and NEDD-1. Fragments of interesting are useful as therapeutic supplement in protein fragments. The proteins are useful as therapeutic supplement in patients with specific deficiency in human NEDD-1 production, and for treating subjects preferably with defects in NEDD-1. The present sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Polynucleotide and polypeptide of human NEDD-1 useful for diagnosing, treating or preventing a disorder associated with decreased or increased expression or activity of the polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; Ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    is a nucleotide sequence related to human NEDD-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human PAPP-Ea associated 17-mer SEQ ID 426.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 4; Page 149; 190pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                dysgenetic pregnancy; primer; ss
                                                                                                                          30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2010WO-US000668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   970
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABS74900 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                           01-JUN-2001; 2001US-00872462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-MAY-2000; 2000US-0207456P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-APR-2001; 2001US-00827998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               954 AAGAGCCAAATTGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 AATAGCCAAAGTGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AEOM-) AEOMICA INT.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-426011/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gu Y, Corrigan A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JS2002102252-A1
                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1-AUG-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABS74900;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABS74900
XXX RAH BERRETA BERRET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
```

ò

(GUYY/) GU Y

Mon Jul 12 11:21:14 2004

(SHAN/) SHANNON M E.

```
This invention describes a novel isolated nucleic acid that encodes one of three new isoforms of human pregnancy associated plasma protein E, hereby-E. The products of the invention have abortive and contraceptive acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the antenatal diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the proteins in chorionic villus samples, to diagnose dysgenetic pregnancies and the artibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies autenatally. This sequence represents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAPP-E; human; pregnancy associated plasma protein E; abortive; contraceptive; gene therapy; vaccine; pregnancy; antenatal; diagnosis; dysgenetic pregnancy; primer; ss.
                                                                                           New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 0 A; 5 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human PAPP-Ea associated 17-mer SEQ ID 427.
                                                                                                                                                 Example 2; Page 131; 353pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      creregercircreric 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABS74901 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-APR-2001; 2001US-00827998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-MAY-2000; 2000US-0207456P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      825 CIGIGICICITITICITC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GUYY/) GU Y.
(SHAN/) SHANNON M E.
                                                             WPI; 2002-697817/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shannon ME;
                               Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2002102252-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABS74901;
                             Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Su Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db
```

This invention describes a novel isolated nucleic acid that encodes one

Example 2; Page 131; 353pp; English

New isolated nucleic acid encoding an isoform of human pregnancy associated plasma protein E, for preventing or aborting pregnancy.

WPI; 2002-697817/75

. 0

Gaps

· 0

Indels

Mismatches

;

841

Ö of three new isoforms of human pregnancy associated plasma protein E, hpapp-E. The products of the invention have abortive and contraceptive activity and can be used for gene therapy or in a vaccine. The mucleic acid, polypeptide encoded by it, or antibody to the polypeptide can be used in pharmaceutical compositions or vaccines for preventing or aborting pregnancy. PAPP-E is used in the anteneral diagnosis of dysgenetic pregnancies. The nucleic acids are used as probes to assess the level of PAPP-E isoform mRNA in chorionic villus samples, and the antibodies can be used to assess the expression levels of PAPP-E isoform antibodies can be used to assess the expression levels of PAPP-E isoform proteins in chorionic villus samples, to diagnose dysgenetic pregnancies antenatally. This sequence repersents an oligomer used in scanning the human PAPP-E genes described in the disclosure of the invention The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABB83999), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSI -1, useful for treating disorders associated with decreased expression activity of human POSH11. Human, POSHL 1, SH3 domain, POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine; . 0 Example 2; SEQ ID NO 1925; 60pp + Sequence Listing; English. 4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; 3; Indels scanning oligonucleotide SEQ ID NO 1925. Sequence 17 BP; 0 A; 4 C; 4 G; 9 T; 0 U; 0 Other; 0; Mismatches 30-JAN-2001; 2001WO-US000664. 30-JAN-2001; 2001WO-US000665. 30-JAN-2001; 2001WO-US000666. 30-JAN-2001; 2001WO-US000667. 30-JAN-2001; 2001WO-US000669. 30-JAN-2001; 2001WO-US000669. 23-MAX-2001; 2001US-00864761. 826 TGTGTCTTTTTCTTCT 842 1 reregercricitrici 17 ABV91212 standard; DNA; 17 BP. gene therapy; transgenic; ss. 28-JAN-2002; 2002EP-00001165. 30-JAN-2001; 2001WO-US000663 82.48; (first entry) 14; Conservative WPI; 2002-684061/74. (AEOM-) AEOMICA INC. Query Match Best Local Similarity Matches 14; Conserv Human POSHL1 Homo sapiens EP1239051-A2 23-DEC-2002 11-SEP-2002, ABV91212; RESULT 492 ABV91212, 2222222222222222888 8 d

```
Haggment of the sequences competitions are conversationed to the sequences concepted by the sequence of the stand that interacts with Rho family small GTPases as well as adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (III) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human PoSHL1 including diagnosing and trreating cancer, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to
the sequences comprising at least 8 contiguous amino acids.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Derwent by the European Patent Office
```

Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 U; 0 Other; Query Match

4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ative 0; Mismatches 3; Indels 3; Indels 777 GAGGGCAGCCCCTCTGG 793 17 GAGGGATCCCCTGTGG 1 Conservative Similarity 14; Local Matches g

. 0

Gaps

0;

ABV90001 standard; DNA; 17 ABV90001; RESULT 493 ABU90001
XX
AC ABU5
XX
DE ABU6
XX
MX
Hume
XX
KW Rho

BP.

23-DEC-2002 (first entry)

Human POSHL1 scanning oligonucleotide SEQ ID NO 714.

Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine; gene therapy; transgenic; ss.

Homo sapiens

EP1239051-A2

11-SEP-2002.

28-JAN-2002; 2002EP-00001165

2001WO-US000664 2001WO-US000665 2001WO-US000663 30-JAN-2001; 30-JAN-2001;

2001WO-US000669. 2001WO-US000670. 2001WO-US000666. 2001WO-US000668. 2001WO-US000667 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001;

(AEOM-) AEOMICA INC.

2001US-00864761 2001US-0328205P

30-JAN-2001; 10-OCT-2001;

23-MAY-2001

Shannon M;

WPI; 2002-684061/74.

Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.

Example 2; SEQ ID NO 714; 60pp + Sequence Listing; English.

The invention relates to an isolated SH3 domain (POSH)-like signalling

```
protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABB8399), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small Grpases as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) caused by altered expression of human POSHL1 including disease and treating caneer, they useful in the development of vaccines and (II) is useful for constructing microarrays which treating cancer, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the harvant by the burnar has based on sequence information supplied to harvant has burners.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, POSHL 1, SH3 domain, POSH-like signalling protein 1; oncogene,
Rho GTPase, signal transduction, gene expression, cancer, vaccine;
gene therapy, transgenic, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·,
                                                                                                                                                                                                                                                                                                                                                                                                                  4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human POSHL1 scanning oligonucleotide SEQ ID NO 717.
                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                          Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001, 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
23-MAY-2001; 2001WS-03282059.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 recrireressasas 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABV90004 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-JAN-2002; 2002EP-00001165
                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 82.4%;
Les 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               836 TTCTTCTCAAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VPI; 2002-684061/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-SEP-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABV90004;
                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABV90004
        $$$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABBB3999), a sequence having 65% sequence identity to (S1), (S1), aving 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an edaptor protein that interacts with Rho family small GTPases as well as Commistream components of the signal transduction pathway. (I) is useful of for identifying a specific binding partner. (I) and nucleic acids (II) for identifying a specific binding partner. (I) and nucleic acids (II) considered by altered expression of human POSHL1 including diagnosing and creating cancer, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of princed specification, but is based on sequence information supplied to prince by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02;
Example 2; SEQ ID NO 717; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human POSHL,1 scanning oligonucleotide SEQ ID NO 1027.
                                                                                                                                                                                                                                                                                                                                                                                   Seguence 17 BP; 3 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US000667.
2001WO-US000668.
2001WO-US000669.
2001WO-US000670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV90314 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-JAN-2002; 2002EP-00001165.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001US-00864761
2001US-0328205P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            839 TTCTCTGAAGACAGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Trcrccegagacactr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-684061/74
                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV90314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Н
                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABV90314/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
```

```
0;
                                                                                                                                                                                 Human POSHL 1 is a processor compression and adaptor protein that interacts with Rho family small GTPsses as well as adaptor protein that interacts with Rho family small GTPsses as well as adaptor protein that interacts with Rho family small GTPsses as well as as domestream components of the signal transduction pathway (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnosing and treating cancer, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to betwent by the European Patent Office
-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                         The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABB8399), a sequence having 6% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, POSH1 1, SH3 domain, POSH-like signalling protein 1, oncogene, Rho GTPase, signal transduction, gene expression, cancer, vaccine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels
                                                           Example 2; SEQ ID NO 1027; 60pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human POSHL1 scanning oligonucleotide SEQ ID NO 1112.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 9 A; 1 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                831 CTCTTTTCTTCTGAA 847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000668.
2001WO-US000669.
2001WO-US000670.
2001US-00864761.
2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV90399 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTTGTTCTTCTCTAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-JAN-2002; 2002EP-00001165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US000667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EP1239051-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-0CT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-SEP-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABV90399;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shannon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABV90399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
           q
```

Shannon M;

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein I (POSHL) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABB8399), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as domostream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating encoding (I) are useful for diagnosing, monitoring disease and treating treating cancer, they useful in the development of vaccines and (II) is useful for measuring and for surveying gene expression and creating transpared to the control of the partners of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to Derwent by the European Patent Office
                                                                                      Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                        Example 2; SEQ ID NO 1112; 60pp + Sequence Listing; English.
WPI; 2002-684061/74.
```

. 0 4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels Sequence 17 BP; 2 A; 6 C; 7 G; 2 T; 0 U; 0 Other; 740 CTTGGTAGGGTCCCAGG 756 CICCGIAGGGCCCAGG 17 82.48; Best Local Similarity 82.4 Matches 14; Conservative Query Match à 셤

. 0

Gaps

ABV91175 standard; DNA; 17 BP ABV91175; RESULT 497 ABV91175

Human POSHL1 scanning oligonucleotide SEQ ID NO 1888. (first entry) Homo sapiens EP1239051-A2 23-DEC-2002 

Human, POSHL 1; SH3 domain, POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine; gene therapy; transgenic; ss.

28-JAN-2002; 2002EP-00001165. 11-SEP-2002

2001WO-US000664. 2001WO-US000665. 2001WO-US000666. 2001WO-US000667. 30-JAN-2001; 30-JAN-2001; 30-JAN-2001;

2001WO-US000668. 2001WO-US000669. 2001WS-US000670. 2001US-00864761. 2001US-0328205P. 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 23-MAY-2001;

(AEOM-) AEOMICA INC

The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (SI, ABBB399), a sequence having 65\$ sequence identity to (S1), (S1) having 95\$ deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small Grpases as well as downstream components of the signal transduction pathway. (I) is useful cor identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnoshing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnoshing and treating caused by altered expression of human POSHL1 including microarrays which are useful for measuring and for surveying gene expression and creating care useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomucleotide useful in examples of the invention. Note: The present sequence did not form part of the privant by the European Patent Office 0 Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1. Gaps .; Example 2; SEQ ID NO 1888; 60pp + Sequence Listing; English. 4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; Ive 0; Mismatches 3; Indels Sequence 17 BP; 1 A; 7 C; 4 G; 5 T; 0 U; 0 Other; 769 17 82.4%; 1 cargercerresectic 753 CAGGGTCCCTAGGCCTC 14; Conservative WPI; 2002-684061/74 Local Similarity Query Match Matches qq à

RESULT 498

ABV89332 standard; DNA; 17 BP (first entry) 23-DEC-2002 ABV89332;

ABV89332/

Human POSHL1 scanning oligonucleotide SEQ ID NO 45.

Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine; gene therapy; transgenic; ss.

SP1239051-A2

11-SEP-2002

30-JAN-2001; 2001WO-US000666. 30-JAN-2001; 2001WO-US000667. 30-JAN-2001; 2001WO-US000668. 30-JAN-2001; 2001WO-US000669. 31-JAN-2001; 2001WO-US000670. 23-MAY-2001; 2001US-00864761. 28-JAN-2002; 2002EP-00001165. 2001WO-US000664 2001WO-US000665 2001WO-US000663 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 

```
(AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200192572-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-DEC-2001.
                                                                                                                 Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABL31366;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABL31366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       원
                                                                                                                                                                                                                                             protein 1 (POSHI 1) polypeptide (1), comprising a sequence of 730 amino acids (S1, ABB83999), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHI 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating cancer, they useful in the development of vaccines and (II) is useful for measuring and for surveying gene expression and creating cancer, they useful in the development of vaccines and (II) is useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomuclectide useful in examples of the invention. Note: The present sequence did not form part of the printed by the Events of the protein information supplied to the protein the control of the protein of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                               Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                 The invention relates to an isolated SH3 domain (POSH)-like signalling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, POSHL 1; SH3 domain, POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction, gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 12.2; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                Example 2; SEQ ID NO 45; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human POSHL1 scanning oligonucleotide SEQ ID NO 1887.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          783 AGCCCCTCTGGTGCCAA 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000664.
2001WO-US000665.
2001WO-US000666.
2001WO-US000667.
2001WO-US000668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV91174 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-JAN-2002; 2002EP-00001165.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17 AGCGCCGCTGCTGCCAA 1
   10-OCT-2001; 2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 82.4°
Matches 14; Conservative
                                                                                                 WPI; 2002-684061/74.
                                  (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-SEP-2002
                                                                     Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABV91174;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV91174
   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
```

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (SL), ABB83999), a sequence having 65% sequence of dentity to (Sl), (Sl), and a sequence having 65% sequence of dentity to (Sl), (Sl), having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as commistream components of the signal transduction pathway. (II) is useful for identifying a specific binding partner. (I) and nucleic acids (II) conceding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnosing and crusting in gene therapy. (III) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating create sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to between by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; human leukocyte antigen; HLA; genotype; polymorphism;
immunogenetic; transplantation; genetic disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; SEQ ID NO 1887; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human HLA genotyping oligonucleotide SEQ ID NO 855.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 1 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                752 CCAGGGTCCCTAGGCCT 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUN-2001; 2001WO-JP004662.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
23-MAY-2001; 2001US-00864761.
10-OCT-2001; 2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUN-2000; 2000JP-00164798.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABL31366 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ccargercerresecr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (NISN ) NISSHINBO IND INC. (SYST-) SYSTEM RES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-684061/74.
```

```
Nishida M;
   Moriya S,
  Matsumura Y,
 Ichihara T,
Kagiya T,
                        WPI; 2002-122074/16
Inoko H,
```

Human leukocyte antigen (HLA) typing, useful for judging HLA genotypes of individuals e.g. by determining immunogenetic differences when transplanting between them.

Claim 10; Page 255; 345pp; Japanese.

The invention relates to a typing kit for judging human leukocyte antigen (HIA) genotype of a sample by hybridising a substrate on which 10-24 base oligonucleotides (ABL30512-ABL31809) originating in the sequences of genes e.g. belonging to HIA class I antigens on human genome and primers for amplification of cleaved nucleic acids relating to gene polymorphisms as alloantigens have been immobilised as primers for amplification of cleaved nucleic acids relating to gene polymorphisms. The method is useful for judging HIA genotypes of individuals by determining immunogenetic differences before transplanting between them, providing genetic information to decide compatibility of organ and tissue for transplantation e.g. of bone marrow, kidney, liver, dancess, Langerhams islet in pancreas and cornea, susceptibility diagnosis of genetic diseases and identifying individuals

Sequence 17 BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other;

.; 0 Length 17; 3; Indels Score 12.2; DB 1; Pred. No. 5.5e+02; Mismatches . 82.4%; 4.28; 14; Conservative Query Match Best Local Similarity Matches

0;

Gaps

à

RESULT 501 ABL31114

ABL31114 standard; DNA; 17 BP

ABL31114;

(first entry) 21-MAR-2002

Human HLA genotyping oligonucleotide SEQ ID NO 603.

polymorphism; Human; human leukocyte antigen; HLA; genotype; polyr immunogenetic; transplantation; genetic disease; ss Human; human leukocyte antigen; HLA;

Homo sapiens

WO200192572-A1.

06-DEC-2001

01-JUN-2001; 2001WO-JP004662.

31-JUN-2000; 2000JP-00164798

(NISN ) NISSHINBO IND INC SYSTEM RES INC (SXSI-)

Matsumura Y, Ichihara T, Kagiya T, Inoko H,

WPI; 2002-122074/16.

Moriya S, Nishida

genotypes of Human leukocyte antigen (HLA) typing, useful for judging HLA gaindividuals e.g. by determining immunogenetic differences when individuals e.g. by determi transplanting between them.

Claim 10; Page 207; 345pp; Japanese.

The invention relates to a typing kit for judging human leukocyte antigen (HLA) genotype of a sample by hybridising a substrate on which 10-24 base

·; genes e.g. belonging to HLA class I antigens on human genome and containing gene polymorphisms as alloantigens have been immobilised as primers for amplification of cleaved nucleic acids relating to gene polymorphisms. The method is useful for judging HLA genotypes of individuals by determining immunogenetic differences before transplanting between them, providing genetic information to decide compatibility of organ and tissue for transplantation e.g. of bone marrow, kidney, liver, pancreas, Langerhans islet in pancreas and cornea, susceptibility diagnosis of genetic diseases and identifying individuals nuclease; Flap endonuclease-1; FEN-1; endonuclease; structure-specific nuclease; invasive cleavage structure; thermostable; DNA polymerase; 5' nuclease viral infection; cancer; forensic analysis; Gaps oligonucleotides (ABL30512-ABL31809) originating in the sequences of ٥; FEN-1 related DNA used within the scope of the invention, #250. 4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels Sequence 17 BP; 2 A; 4 C; 3 G; 8 T; 0 U; 0 Other; Lyamichev VI, Kaiser MW, Lyamicheva N; (THIR-) THIRD WAVE TECHNOLOGIES INC. 825 CTGTGTCTCTTTCTTC 841 1 creacrercarricite 17 ADE53098 standard; DNA; 17 BP Methanocaldococcus jannaschii 15-NOV-2000; 2000US-00713601. 17-NOV-2000; 2000US-00714935. 15-NOV-2001; 2001WO-US044953. ilarity 82.4%; Conservative paternity determination; ds. (first entry) Local Similarity les 14; Conserv WO200270755-A2 29-JAN-2004 12-SEP-2002. ADE53098; Query Match RESULT 502 ADE53098/c Matches The state of the s \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$ ઠે g

The invention discloses a new composition (1) which comprises a purified flap endonuclease-1 (FEN-1) from e.g. Sulfolobus solfataricus, Pyrobaculom aerophilum or a chimerical FEN-1 endonuclease having a portion of the above endonuclease in addition to that of Pyrococcus horikoshii and Aeropyrum pernix. Also claimed is a composition comprising an isolated nucleic acid sequence encoding the endonuclease mentioned above, a composition comprising a vector having the nucleic acid sequence cited above, a composition comprising a host cell and vector cited above, the specises mentioned in composition (1), and a purified escond structure specific nuclease and detecting a target sequence, comprising: (a) providing a sample suspected of containing the target sequence, sequences and sequence variants for detecting the presence of viral or bacterial infections or cancer, comprises purified or chimerical FEN-1 New composition useful for detecting and characterizing nucleic acid Example 62; SEQ ID NO 280; 871pp; English. WPI; 2002-750464/81 endonuclease

ä

Amson

Tuijnder M, Telerman A,

```
product. The composition is useful in detecting and characterising specific nucleic acid sequences and sequence variants which can be used in detecting the presence of viral or bacterial infections, and other diseases such as cancer. The composition may also be used in forensic analysis or for paternity determinations. The sequence presented is a FEN
oligonucleotides capable of forming an invasive cleavage structure in the
         presence of the target sequence, and a FEN-1 endonuclease selected from the species cited above and (b) exposing the sample to the oligonucleotides and FEN-1 endonuclease. The second structure-specific
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
                                                                                                                                                                                                                                                                                                                                                                                                                                    ·
0
                                                                                                                                                                                                                                                                                                                                                                                                              4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
                                                                                                                                                                                                                                                                                                                                                                    related DNA used within the scope of the invention.
                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 7 A; 2 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human tumour suppressor sequence #1109.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MOLE-) MOLECULAR ENGINES LAB SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          892 TACTICICAGCTICIGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC52342 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-JUN-2001; 2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-JUN-2001; 2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17 tacrtagcagcrictrc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                    14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FR2826373-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC52342;
                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC52342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8%
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
```

ô

```
÷
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The
                                                                                                                                                                                The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                          New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                             This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
                                                                                                                                                                                                                                                                                                                                                                     ..
                                                                                                                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                                                                                     3; Indels
                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 4 A; 4 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                Score 12.2; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human tumour suppressor sequence #471.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Amson R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 149; 798pp; French.
                                                                                                                                  Claim 1; Page 296; 798pp; French
                                                                                                                                                                                                                                                                                                                                                                                                        884 GATGCACTTACTTCTCA 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GATCCACTTAGTTCTTA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-JUN-2001; 2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-JUN-2001; 2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                     4.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC51704 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                      14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-250498/25.
                              WPI; 2003-250498/25.
                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FR2826373-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tuijnder M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACC51704;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACC51704/c
                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                         G-cleaver, amberzyme; cancer; REL-A activity; breast cancer; lung cancer, prostate cancer; colorectal cancer; brain cancer; oesophageal cancer; stomach cancer; cervical cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel enzymatic nucleic acid molecules which down regulates expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention describes an enzymatic nucleic acid molecule (I) which down
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially Mg^2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           head and neck cancer; Ovarian cancer; melanoma; lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide; doxorubin; fluorouraci; carbopatin; edatrexate; gencitabine; radiation therapy; inflammatory disease; asthma; diabetes; returnately; restenosis; Crohn's disease; obesity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion injury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                        Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or
                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a sequence encoding a subunit of nuclear factor kappă B useful<sup>*</sup>f
treating cancer, inflammatory disorders and autoimmune diseases.
                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                   Necrosis factor kappa B (NFKB) sub-unit modulating DNAzyme #62.
                                      Length 17;
                                                                         3; Indels
BP; 8 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
                                  4.2%; Score 12.2; DB 1;
82.4%; Pred. No. 5.5e+02;
                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Draper KG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 3; Page 47; 72pp; English.
                                                                                                           896 TCTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92US-00987132.
94US-00245466.
94US-00291932.
96US-00777916.
                                                                                                                                                                                                                                             BP.
                                                                                                                                            rcrecricicreare 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-MAY-2001; 2001US-00864785.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stinchcomb DT, Mcswiggen J,
                                                                                                                                                                                                                                         ACA08293 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                03-JUN-2003 (first entry)
                                                                         14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (STIN/) STINCHCOMB D T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-340953/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DRAPER K G.
                                                     Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2002177568-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-DEC-1992;
18-MAY-1994;
15-AUG-1994;
Sequence 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-NOV-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                              17
                                                                                                                                                                                                                                                                             ACA08293;
                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MCSW/) 1
(DRAP/) 1
                                                                                                                                                                                                  Matches
g
                                                                                                             ð
                                                                                                                                              g
```

```
ó
multidrug resistant cancer. The method involves use of other drug therapies such as monoclonal antibodies, RBL-A-specific inhibitors or chemotherapy including paclitaxel, docetaxel, displatin, methotrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, gencitabine or radiation therapy. The enzymatic and antisense nucleic acid molecules are also useful for treating inflammatory disease such as inheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury (central nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence represents an enzymatic nucleic acid used to modulate the function of a necrosis factor kappa B sub-unit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; prostate cancer; colorectal cancer; brain cancer; cervical cancer; stomach cancer; bladder cancer; pancreatic cancer; cervical cancer; head and neck cancer; ovarian cancer; melanoma; plymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate; chemotherapy; paclitaxel; docetaxel; cisplatin; edatrexate; gencitabine; radiation therapy; inflammatory disease; asthma; diabetes; rheumatic arthritis; restenosis; crohn's disease; obesity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion injury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                       ;
                                                                                                                                                                                                                                                                                                                            4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                      Sequence 17 BP; 2 A; 8 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NFKB sub-unit modulating inozyme substrate #260.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Draper KG;
                                                                                                                                                                                                                                                                                                                                                                                                            875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94US-00245466.
94US-00291932.
96US-00777916.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-MAY-2001; 2001US-00864785.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92US-00987132.
                                                                                                                                                                                                                                                                                                                                                                                                        859 GGCTCCAGTTGGAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACA06441 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                 17 GGGGCAGTTGGAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STINCHCOMB D T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-340953/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRAPER K G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCSWIGGEN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2002177568-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             03-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .5-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACA06441;
                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (STIN/) (MCSW/) N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRAP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACA06441
      ઠ
```

Mcswiggen J, Draper KG;

94US-00291932. 96US-00777916.

```
Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; brain cancer; brain cancer; oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer; cervical cancer; had and neck cancer; ordarian cancer; melanoma; lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxal; docetaxel; cisplatin; methotrexate; cyclophosphamide; daxorubin; fluorouracil carboplatin; edatrexate; gencitabine; radiation therapy; inflammatory disease; asthma; diabetes; rheumatorid arthritis; restenoâis; Crohn's disease; bashwa; diabetes; rheumatorid arthritis; restenoâis; Crohn's disease; bashwa; diabetes; transplant/graft rejection; reperfusion injury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NFKB sub-unit modulating inozyme substrate #556.
                                                                                                                                                                                                                                                                                                                                                                                                                                          759 CCCTAGGCCTCCACTTC 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACA06737 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-MAY-2001; 2001US-00864785.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94US-00245466.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92US-00987132.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   03-JUN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 70.6'
                                                                                                                                                                                                                                                                                                                                     nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JS2002177568-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-DEC-1992;
18-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACA06737;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACA06737/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               d
                                                                                                                                                                                                                                                                                                                                                                                                                                           à
```

```
Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.
                                                                                                                                                                                                                                                                                                                                                                    Claim 3; Page 35; 72pp; English.
                                                                     STINCHCOMB D
                                                                                              MCSWIGGEN J.
                                                                                                                                                                                                                    WPI; 2003-340953/32.
                                                                                                                        DRAPER K G.
                                                                                                                                                                      Stinchcomb DT,
15-AUG-1994;
                       23-DEC-1996;
                                                                                                                     (DRAP/)
                                                                       (STIN/)
                                                                                                 (MCSM/)
  regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially MG-2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stoomach, bladder, panoreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or wiltidrug resistant cancer. The method involves use of other drug therapies such as monoclonal antibodies, REL-A specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, methotrexate, gemiciabine or radiation therapy. The enzymatic and antisense nucleic acid molecules are also useful for treating inflammatory disease such as the control and isease, lupus, multiple solerous, inturversity, autoimmune disease, lupus, multiples sclerosis, transplant/graft control.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
                                                                       invention describes an enzymatic nucleic acid molecule (I) which down
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rejection, gene therapy applications, ischaemia/reperfusion injury (central nervous system (CNS) and myocardial), glomenulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence repersents the substrate of a novel enzymatic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.2%; Score 12.2; DB 1; Length 17; 70.6%; Pred. No. 5.5e+02; Live 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 1 A; 12 C; 2 G; 0 T; 2 U; 0 Other;
                            Claim 3; Page 31; 72pp; English.
```

The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFKB), where (I) is an inozyme, Zinzyme, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially MG^2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or multidrug resistant cancer. The method involves use of other drug therapies such as monoclonal antibodies, REL-A specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, caid molecules are also useful for treating inflammatory disease such as acid molecules are also useful for treating inflammatory disease such as the such as are also useful for treating inflammatory disease such as the such as are also acid molecules or the such as are also acid molecules are also acid mole ö rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury (central nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence represents the substrate of a novel enzymatic nucleic acid molecule Gaps . 4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; lve 0; Mismatches 3; Indels Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other; Human MDZ3 scanning oligonucleotide SEQ ID 245. 934 TCCAGAGAATTTTACGC 950 ADA99256 standard; DNA; 17 BP. 82.48; 17 rccadadadarta (first entry) Local Similarity 82.4 20-NOV-2003 ADA99256; Query Match RESULT 508 Best Loca Matches ADA99256 g à

Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.

Homo sapiens EP1281758-A2

05-FEB-2003

```
30-JUL-2002; 2002EP-00016874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JUL-2002; 2002EP-00016874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gu Y, Nguyen C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 82.4°,
'-h-s 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 developmental disorder; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-NOV-2003 (first entry)
                                                                                                                                                                                                                                                               WPI; 2003-423107/40
                                                                                                                                              (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EP1281758-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-FEB-2003
                                                                                                                                                                                                        Shannon M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shannon M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADA99514;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADA99514/6

ID ADA99

XX AC ADA99

XX ZO-NG

XX ZO-NG

XX ZO-NG

XX ZINC

X
ò
```

```
The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is encoded at chromosome 6p21.3-22.2, MD27 is encoded at chromosome 6p21.3-22.2, MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 16p21.2 and MD212 is encoded at chromosome 16p21.2 and MD21, encoded at chromosome 16p21.2 and MD21, encoded at chromosome 2cc associated with decreased or increasing or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD212, e.g. cancer or developmental disorders: The nucleic caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross alterations in MD23, MD24, MD27, or MD212. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                     New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, ribozyme, short interfering RNA, siRNA, HER2, K-Ras;
enzymatic nucleic acid, H-Ras, N-Ras, HIV, cytostatic, anti-HIV;
anti-rheumatic, cancer, AIDS, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 12.2; DB 1; Length 17; Pred. No. 5.5e+02; 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 5 A; 4 C; 7 G; 1 T; 0 U; 0 Other
                                                                                                                                                                                                 Example 8; SEQ ID NO 503; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human HER2 DNAzyme substrate #788.
                                                                                                                                                MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABZ65331 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-MAY-2002; 2002WO-US016840.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 ccircaciccicagieci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  760 CCTAGGCCTCCACTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-MAR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14; Conservative
                            WPI; 2003-423107/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200297114-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABZ65331;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 510
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                           proteins and their coding sequences: MD23, MD24, MD21, MD21 is encoded at chromosome 7q22.1, MD24 is encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2, MD27 is encoded at chromosome 16p112 and MD21 is encoded at chromosome 15q26.1. The MD23, MD24, MD27, and MD212 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross alterations in MD23, MD24, MD27, or MD212. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytostatic, immunostimulant, gene therapy, vaccine, human, zinc finger protein, MDZ3; MDZ4; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
                                                                                                                                                                                                                                                              New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                           present invention relates to novel human zinc finger-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 3 A; 5 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 12.2; DB 1;
Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human MDZ3 scanning oligonucleotide SEQ ID 503.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                          Example 8; SEQ ID NO 245; 103pp; English.
                                                                                                                                                                                                                                                                                                                                              MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ,0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 rccagagacriricggc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADA99514 standard; DNA; 17 BP
                                                                  02-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.2%;
                                                                                                                                                                    Gu Y, Nguyen C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              934 TCCAGAGAATTTTACGC
```

ö

Gaps

0;

Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.

WPI; 2003-140484/13.

```
ACD50454,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 X G G G
                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                 acid molecule or an enzymatic mucleic acid molecule, that modulates expression of a mucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66534, ABZ66530 - ABZ66530 - ABZ66531 - ABZ66530 - ABZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences
                                                              invention relates to a novel short interfering RNA (siRNA) nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.2%; Score 12.2; DB 1; Length 17; 70.6%; Pred. No. 5.5e+02; ive 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 2 A; 9 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human HER2 DNAzyme substrate #415.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 4; Page 141; 185pp; English.
Claim 4; Page 148; 185pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                757 GICCCIAGGCCICCACT 773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 GCCCCAGGUCUCCACU 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABZ64958 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2002; 2002WO-US016840.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 70.6
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-140484/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200297114-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABZ64958;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABZ64958/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo
```

à QQ

```
ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead riboxyme; DNAzyme; inozyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state, HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
ABZ66530 - ABZ66585 represent substrate/target sequences for the human
                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ь,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ree
                                                                                                                                                                                  0;
                                                                                                                                      4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pavco
                                                                                           5 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen J, Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HBV hammerhead ribozyme substrate sequence #73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 137; 387pp; English.
                                                                                                                                                                                                                                  875
                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001US-00877478.
2001US-0296876P.
2001US-0335059P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-MAR-2002; 2002WO-US009187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001US-00817879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001US-0337055P
                                                                                                                                                           82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   INC.
                                                                                                                                                                                                                                  859 GGCTCCAGTTGGAACAC
                                                                                                                                                                                                                                                                            Gecrecaerreacacae
                                                                                                                                                                                                                                                                                                                                                                                           ACD50454 standard; RNA; 17
                                               ribozymes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                           Sequence 17 BP; 3 A; 5 C;
                                                                                                                                                                                     14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RIBOZYME PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Macejak D,
Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-229207/22.
                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAVCO P.
LEE P.
DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ROBERTS E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200281494-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-JUN-2001; 2
08-JUN-2001; 2
24-OCT-2001; 2
05-DEC-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-0CT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Blatt L, I
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                       ACD50454;
                                                                                                                                                                                                                                                                            17
                                                                                                                                          Query Match
Best Local 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-)
(BLAT/)
(MACE/)
(MCSW/)
(MORR/)
(PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DRAP/)
(ROBE/)
                                                                                                                                                                                                                                                                                                                                                RESULT 512
                                                                                                                                                                                       Matches
```

```
;
0
inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptese primer sequences, as well as oligonuclectides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV opna. The nucleic acids may be used to modulate the expression of HBV opna and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV ribozyme, indoxyme, indoxyme, indoxyme, indoxyme, indoxyme, indoxyme indoxyme sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammeribead riboxyme; MAXzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lee P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pavco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 2 A; 4 C; 5 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mcswiggen J, Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HBV amberzyme substrate sequence #12.
                                                                                                                                                                                                                                                                                                                                                                                                           disclosed in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                703 TCCAGCGAGTCCCAGGA 719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACD55354 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-MAR-2002; 2002WO-US009187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-2001; 2001US-00817879.
08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-0CT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 TCCAGCGATAACCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Macejak D, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-229207/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PAVCO P.
LEE P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200281494-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACD55354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MORR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLAT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DRAP/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MCSM)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 513
ACD55354/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
            THE STATE OF THE S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                à
```

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HEV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes, can enzymes, amberzymes, and G-cleaver ribozymes. DNAzymes, inozymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and gapamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV or genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds complained the expression and/or replication of HV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene carcinoma. The present sequence represents a substrate for one of the HBV ribozyme, inozyme, and present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                    hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic acid molecule, Hepatitis C virus, HCV; Hepatitis B virus, HBV; RNA stability, RNA expression, RNA synthesis, antisense; enzymatic nucleic acid, hammerhead ribozyme; dnozyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule, aptemer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state, HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                  Novel compound useful for treating cirrhosis, liver failure,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 12.2; DB 1; Length 17;
Pred. No. 5.5e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 4 A; 4 C; 7 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HCV DNAzyme substrate sequence #1630.
                                                                                               Example 1; Page 202; 387pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACD60052 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 caddarcccadrerre 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-2002; 2002WO-US009187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001US-00817879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            24-SEP-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BLATT L.
MACEJAK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200281494-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACD60052;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (BLAT/) I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACD60052,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

```
KWW XEXTX
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
                                                                                                                                                                                                                         The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis E virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, and enzymes, ainzymes, amberzymes, and G-cleaver ribozymes. DNAzymes, inczymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepercellular carcinoma. The present sequence represents a substrate for one of the HCV DNAzyme or minus strand DNAzyme sequences disclosed in the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·
0
                                                                                                                                                     Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; dispase state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acid molecule, Hepatitis C virus; HCV; Hepatitis B virus; HBV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                        ь;
                                                                                         Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ative 0; Mismatches 3; Indels
                                                                                        Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HCV minus strand DNAzyme substrate sequence #1023.
                                                                                        Mcswiggen J, Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence 17 BP; 4 A; 2 C; 8 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                        Claim 1; Page 263; 387pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       886 TGCACTTACTTCTCAGC 902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACD63384 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17 TCCACGTACTCCTCAGC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-SEP-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                        Macejak D,
Roberts E;
MCSWIGGEN J.
MORRISSEY D.
PAVCO P.
LEE P.
DRAPER K.
                                                                                                                             WPI; 2003-229207/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200281494-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14;
                                                                                                      X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACD63384;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                         Blatt L,
  (MCSM/)
                         (PAVC/)
(LEEP/)
(DRAP/)
                                                                (ROBE/)
                                                                                                      Draper
              (MORR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACD63384
  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
```

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inczymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed incymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed transcriptase and/or HBV reverse transcriptase primer sequences, as well so oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV DNA. The nucleic acids may be used to modulate the expression of HBV only and compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV increasion in the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              nepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid molecule, Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ь.
Д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel compound useful for treating cirrhosis, liver failure,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.2%; Score 12.2; DB 1; Length 17;
88.8%; Pred. No. 5.5e+02;
ve 4; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pavco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 3 A; 4 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HBV inozyme substrate sequence #503.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; Page 293; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    740 CTTGGTAGGGTCCCAGG 756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CUUGGUAUGCUACCAGG 17
                                                                               08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
26-MAR-2002; 2002WO-US009187.
                                                        2001US-00817879
                                                                                                                                                                     05-DEC-2001; 2001US-0337055P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               58.88;
                                                                                                                                                                                                                             RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACD52628 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Macejak D,
Roberts E;
                                                                                                                                                                                                                                                                            MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-229207/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                            LEE P.
DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ROBERTS E
                                                                                                                                                                                                                                                                                                                                                                    PAVCO P.
                                                                                                                                                                                                                                                    BLATT
                                                     26-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACD52628;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                 (BLAT/)
(MACE/)
(MCSW/)
(MORR/)
                                                                                                                                                                                                                                                                                                                                                                    (PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                         (DRAP/)
(ROBE/)
                                                                                                                                                                                                                             (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 516
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACD52628
```

ó

Nucleic acid molecule, Hepatitis C virus, HCV; Hepatitis B virus, HBV, RNA stability, RNA expression, RNA synthesis, antisense, enzymatic nucleic acid, hammerhead ribozyme; DNAzyme; inozyme; zinzyme;

HCV minus strand DNAzyme substrate sequence #834.

(first entry)

24-SEP-2003

ACD62971;

HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.

Hepatitis B virus.

WO200281494-A1.

17-0CT-2002

amberzyme; G-cleaver ribozyme; decoy molecule; aptemer; HBV reverse transcriptase; Brhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.

Hepatitis C virus.

08-JUN-2001; 2001US-00877478. 08-JUN-2001; 2001US-0296876P. 24-OCT-2001; 2001US-0335059P. 05-DEC-2001; 2001US-0337055P.

RIBOZYME PHARM INC.

(RIBO-)

26-MAR-2002; 2002WO-US009187.

2001US-00817879

26-MAR-2001;

WO200281494-A1

17-OCT-2002.

```
Example 1; Page 159; 387pp; English
                                                                                                                                                                                                                                                                                              928 CCACCCTCCAGAGAATT 944
                                                                                                                                                                                                                                                                                                   CCAGCAUCCAGGGAAUU 17
                                                                                                                                                                                                                                                                                                                            ACD62971 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                     Matches 11; Conservative
                                                                                                                               Macejak D,
Roberts E;
                                                                                       BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                             WPI; 2003-229207/22.
                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                              LEE P.
DRAPER K.
                                                                                                                       ROBERTS E
                                                                                                         PAVCO P.
                                                                                                                               Blatt L, N
Draper K,
                                                                                                                                                               infection
                                                                                                             (LEEP/)
(DRAP/)
                                                                                                                       (ROBE/)
                                                                                       (BLAT/)
(MACE/)
                                                                                                 (MCSM/)
                                                                                                     (MORR/
                                                                                                          PAVC/
                                                                                                                                                                                                                                                                                                                    RESULT 517
                                                                                                                                                                                                                                                                                                                        ACD62971
ID ACD
```

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HHV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes, amberzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV compounds and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV infortion and year into and year in the present vivoarious in zinzyme or amberzyme sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 5 A; 5 C; 4 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disclosed in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.2%;
```

DB 1; Length 17;

Score 12.2;

4.2%;

Query Match

Sequence 17 BP; 4 A; 7 C; 3 G; 0 T; 3 U; 0 Other;

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes, incymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV campounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            carcinoma. The present sequence represents a substrate for one of the HCV DNAzyme or minus strand DNAzyme sequences disclosed in the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pavco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 289; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                        26-MAR-2001; 2001US-00817879.
08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                                                                                                              26-MAR-2002; 2002WO-US009187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Macejak D,
Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-229207/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LEE P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Blatt L, |
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nvention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DRAP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MORR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PAVC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MCSW/)
.;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    ь;
Б
                                                                                                                                                                                                                                                                                                                                                                                                                                    Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
                                                                                                                                                                                                                                                                                                                                                                                                                                   Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 12.2; DB 1;
Pred. No. 5.5e+02;
3; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3
```

Lee Ъ,

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HBV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds
              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               treating cirrhosis, liver failure, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                    Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٠<u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Lee
              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pavco P,
              Indels
                                                                                                                                                                                                                           HCV minus strand DNAzyme substrate sequence #1039.
 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen J, Morrissey D,
Pred. No. 5.5e
3; Mismatches
                                                                                                                                                                                                                                                                                                                                                        virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 293; 387pp; English.
              3;
                                         803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; 2001US-00817879.
; 2001US-0296876P.
; 2001US-0335059P.
; 2001US-0337055P.
                                                                      17
                                                                                                                                           ACD63400 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-2002; 2002WO-US009187
 64.78;
                                          787 CCTCTGGTGCCAAGAGC
                                                          CCUAUGCUGCCAACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel compound useful for hepatocellular carcinoma,
                                                                                                                                                                                                  (first entry)
                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Macejak D, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-229207/22.
  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                   Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PAVCO P.
LEE P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                              WO200281494-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-JUN-2001; 2
08-JUN-2001; 2
24-OCT-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-DEC-2001;
                                                                                                                                                                                                  30-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                          17-0CT-2002
                11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Blatt L,
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MORR/)
(PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BLAT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DRAP/)
                                                                                                                 518
                Matches
                                                                                                                                ACD63400
                                                                                                               RESULT
                                                                                                                                                       à
```

```
0
                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration,
                                                                       HCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
that modulate the expression and/or replication of HCV. The compounds methods of the invention are useful for the treatment of degenerative idisease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the DNAzyme or minus strand DNAzyme sequences disclosed in the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tumour suppression, tumour reversion, apoptosis, virus resistance,
viral disease, tumour, cell degeneration, cancer, Alzheimer's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Murine oligonucleotide associated with tumour supression, SEQ ID 5944.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
                                                                                                                                                                                                            ;
                                                                                                                                                                          Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                            3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 8 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                        Sequence 17 BP; 4 A; 7 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                          Score 12.2; DB 1;
Pred. No. 5.5e+02;
                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 725; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ξ
                                                                                                                                                                                                            .
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tuijnder
                                                                                                                                                                                                                                              857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                            17
                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2001; 2001FR-00011979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ilarity 82.4%;
Conservative
                                                                                                                                                                          4.2%;
                                                                                                                                                                                                                                            841 CTCTGAAGACAGCGTCC
                                                                                                                                                                                                                                                                 1 CUGUGAAGACACCCUCC
                                                                                                                                                                                                                                                                                                                                                 697/c
ACC68697 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                   01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-MAR-2003
                                                                                                                                                                                                            11;
                                                                                                            invention
                                                                                                                                                                                                                                                                                                                                                                                                 ACC68697;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                          Query Match
                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                 519
                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                   ACC68697,
                                                                                                                                                                                                                                                                                                                                 RESULT
                                                                                                                                                                                                                                                                                                                                                                                   555555555888
                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                            g
```

```
20-NOV-2003
                                                                                                          27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADA61967;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADA61967
   ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
O
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC6806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of gene chip; in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                 New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                        Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                    Murine oligonucleotide associated with tumour supression, SEQ ID 1900.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Murine oligonucleotide associated with tumour supression, SEQ ID 3815.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                 present invention relates to murine oligonucleotides (ACC62754-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.2%; Score 12.2; DB 1; Length 17
82.4%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 5 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                            Disclosure; Page 253; 738pp; French
                                                                                                                                                                                                                                                                                                                                         Tuijnder M;
896 TCTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                912
                                                                          BP.
                                                                                                                                                                                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                                                                                                                                           17-SEP-2002; 2002WO-IB004210
                                                                                                                                                                                                                                                                                               17-SEP-2001; 2001FR-00011979.
             17 TCTCTGCTTCTCTGATC
                                                                       ACC64653 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               896 TCTCAGCTTCTGCGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC66568 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rcacagerrereagare
                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 82.4
les 14; Conservative
                                                                                                                                                                                                                                                                                                                                         Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-333167/31.
                                                                                                                                                                                          schizophrenia; ss
                                                                                                                                                                                                                                  WO2003025176-A2
                                                                                                                                                                                                              Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUL-2003
                                                                                                                01-JUL-2003
                                                                                                                                                                                                                                                       27-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                           ACC64653;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC66568;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                            ACC64653/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC66568
ID ACC6
XX
AC ACC6
XX
DT 01-J
XX
                                                                        ò
                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to murine oligonuclectides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene othly, in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ss; probe; human; chorionic gonadotropin; allele zygosity; polymorphism; breast cancer 1, BRCA1; single nucleotide polymorphism; SNP; parasitic disease; infectious disease; HIV; hepatitis; influenza; adenovirus; typhoid; antigen quantitation; probe.
Cytostatic, virucide, neuroprotective, nootropic, neuroleptic, murine, tumour suppression, tumour reversion, apoptosis, virus resistance, viral disease, tumour, cell degeneration, cancer, Alzheimer's disease,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human breast cancer 1, BRCA1, allele specific probe 5382insC-Normal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.2%; Score 12.2; DB 1; Length 17; llarity 82.4%; Pred. No. 5.5e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 477; 738pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                       17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-SEP-2001; 2001US-00956857.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                756 GGTCCCTAGGCCTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATCCATGGGCCTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADA61967 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
es 14; Conserv
                                                                                                                                                                                                                                                             WO2003025176-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003054356-A1
                                                                                                               schizophrenia;
                                                                                                                                                                                    Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
```

21-AUG-2003.

```
autibody respectively specific for one or more epitopes. The antiper autibody respectively specific for one or more epitopes. The antiper molecule is a human chorionic gonadotropin (hCG) related molecule and the molecule is a alpha subunit or its variant, or a beta-subunit or its variant, and the reactant is a respective antibody. The method is useful cfor determining allele zygosity of mucleic acid molecules of a genetic locus two finucleic acid molecules of a genetic locus having two alleles. The method is useful for detecting several single mucleotide polymorphism of mucleic acid molecules of a genetic locus having multiple alleles. The genetic locus is the human breast cancer 1 (BRCA1) gene. The method is useful for detecting several single nucleotide polymorphism. The method is useful for determining parasitic and infectious diseases, human immunodeficiency virus (HIV), hepatitis, influenza, adenovirus, or typhoid The method is useful for quantitating bacterial, mycophasmal, fungal antigens and antibodies like Salmonella O antigens, or excloxins. The present sequence represents the human breast cancer 1, BRCA1, allele specific probe 5382insC-Normal.
                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a method of detecting several reactive sites on an analyte. The method is useful for detecting several reactive sites on an analyte such as a nucleic acid molecule. Optionally, the analyte is an antigen molecule, the reactive site is one or more epitopes on the antigen molecule, and the reactant is one or more fluorescently-labelled
                                                                                                                                                                                                                                               Detecting several reactive sites on an analyte useful for determining antigens in immunoassays, comprises reacting reactive sites with microspheres comprising reactants to form reactant-reactive site pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 7 A; 4 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                 Oliver KG;
                                                                                                                                                                                                                                                                                                                                                                              Example 3; Page 14; 20pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              706 AGCGAGTCCCAGGAGAG 722
21-SEP-2000; 2000US-0234430P.
                                                                                                                                                    JI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14; Conservative
                                                                                                                                                    Burroughs
                                              (JACO/) JACOBSON J W. (BURR/) BURROUGHS J L.
                                                                                                                                                                                                  WPI; 2003-777159/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                (OLIV/) OLIVER K G.
                                                                                                                                                                                                                                                                                                                               that are detected.
                                                                                                                                                 Jacobson JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
  à
```

```
0;
Gaps
.;
0
                        1 AGAGAATCCCAGGACAG 17
                           g
```

```
hypersensitivity reaction; abacavir; 57.1 ancestral haplotype; Major Histocompatibility Complex, MHC; human leukocyte antigen; HLA; HLA-B+701, CHA-BP7; HLA-DD3; Human immunodeficiency virus; HIV; immune system; acquired immune deficiency syndrome; ALD3; peripheral nervous system; antiviral compound; HIV replication inhibitor; antiviral drug; abacavir; human; sequencing primer; PCR; ss; SNP detection; pyrosequence; rs483638.
                                                                                                                   Human PCR primer rs483638p related to abacavir hypersensitivity.
            ADAS0323 standard; DNA; 17 BP
                                                                                20-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                               ADA50323;
ADA50323,
```

WO2003040369-A2. Homo sapiens.

15-MAY-2003.

WO2003068985-A1.

```
This invention relates to a method for determining whether a patient will show a hypersensitivity, or similar, reaction to abacavir by typing the patient for presence of the S7.1 ancestral haplotype of the Major Histocompatibility Complex (MHC). The ancestral haplotype is defined by presence of the human leukcoyte antigen (HLA) subtypes HLA-B*5701, C4A6, HLA-DR7 and HLA-DQ3. Human immunodeficiency virus (HIV) is the cetiological agent of a complex disease that includes progressive destruction of the immune system (Gaquired immune deficiency syndrome, AIDS) and degeneration of the peripheral nervous system. It is known that compounds which act as inhibitors of HIV replication are effective agents in the treatment of AIDS. Treatment with an antiviral to a person with hypersensitivity may lead to a range of ailments and cocasionally death. Patients who have the 57.1 ancestral haplotype are at oncasionally death. Patients who have the 57.1 ancestral haplotype are at conside reverse transcriptase inhibitor (NRTI) antiretroviral drug of the unvention may be useful for identifying patients who need to be excluded from treatment with abacavir. The present sequence is that of a human sequencing and PCR amplification primer which was used for SNP detection of the presence or absence of the 57.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                  Method for the identification of subjects hypersensitive to abacavir, useful for excluding patients from treatment, comprises detecting the presence of the 57.1 ancestral haplotype.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.2%; Score 12.2; DB 1; Length 17; 32.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tumour suppression/reversion associated nucleotide #2654.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 2 A; 1 C; 7 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ancestral haplotype of the MHC of the invention.
                                                                                                                                                                                                                                                                                                                Example 2; Page 23; 43pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              913 AGATTATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADB42331 standard; DNA; 17 BP.
                                     12-FEB-2003; 2003WO-AU000183.
                                                                            12-FEB-2002; 2002AU-00000464.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 AGATCACCATCACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14; Conservative
                                                                                                                   (EPIP-) EPIPOP PTY LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
                                                                                                                                                                                           WPI; 2003-697530/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADB42331;
                                                                                                                                                        Mallal S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADB42331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
```

. 0

17-SEP-2002; 2002WO-IB004219

```
expression of the nucleotides.
                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                      17-SEP-2002; 2002WO-IB004219
                                                                                                                                                                                  1 GATCACTCTCCTGAGTT
                                                                                                                                                                          870 GAACACTTTCCTGAGAT
                                                                                                                                                                                                      ADB40319 standard; DNA; 17
                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                   Conservative
                       Telerman A, Amson R,
                                                                                                                                                                                                                      (revised)
                              WPI; 2003-441574/41
                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                      WO2003040369-A2.
                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                      18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                              15-MAY-2003.
                                                                                                                                                                  14;
                                                                                                                                                                                                                                                      diagnosis.
                                                                                                                                                                                                              ADB40319;
                                                                                                                                                          Query Match
                                                                                                                                                                                              RESULT 525
                                                                                                                                                                  Matches
                                                                                                                                                                                                  ДD
                                                                                                                                                                          8
```

fragments of at least 15 consecutive nucleotides of these nucleotides, a fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). prognosis of these diseases. The nucleotides and polypeptides can New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies. also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal Disclosure; Page 342; 771pp; French Σ (MOLE-) MOLECULAR ENGINES LAB 17-SEP-2001; 2001FR-00011981

.; 0 4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; Ive 0; Mismatches 3; Indels Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other; 82.48;

886 17 Tumour suppression/reversion associated nucleotide #642.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;

17-SEP-2001; 2001FR-00011981

Tuijnder M; (MOLE-) MOLECULAR ENGINES LAB Telerman A, Amson R,

WPI; 2003-441574/41

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 107; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides. The nucleotides are used as probes or primers for detecting, chackedides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour superssion or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgoric animals, as recombinant polypeptides, and to prepare transgoric animals, as recombinant polypeptides, and to useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours of viral infections or diseases characterized by development of tumours or creatment of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can be used to screen for their specific interactive molecules. potentially useful for treating diseases associated with abnormal expression of the nucleotides

Sequence 17 BP; 4 A; 5 C; 2 G; 6 T; 0 U; 0 Other;

·, Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 5.5e+02; Matches 14; Conservative 0; Mismatches 3; Indels

ö

Gaps

ð d

·,

Gaps

ADB40584 standard; DNA; 17 BP RESULT 526 ADB40584

(revised)
(first entry) 18-DEC-2003 04-DEC-2003 ADB40584;

Tumour suppression/reversion associated nucleotide #907.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; 

Homo sapiens.

WO2003040369-A2.

L5-MAY-2003.

17-SEP-2002; 2002WO-IB004219.

17-SEP-2001; 2001FR-00011981.

(MOLE-) MOLECULAR ENGINES LAB.

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies or viral infections or diseases characterized by development of tumours or viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 12.2; DB 1; Denser Pred. No. 5.56+02; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tumour suppression/reversion associated nucleotide #3038.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 8 A; 3 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                            Disclosure; Page 138; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tuijnder M;
 Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              909 GATCAGATTATCATCAC 925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 GATCAGAAATTATCAC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADB42715 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      / Match 4.2%;
Local Similarity 82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   relerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
Amson R,
                                  WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003040369-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-DEC-2003
 Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADB42715;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADB4271
 Dp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŏ
```

WPI; 2003-441574/41.

fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as reperimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease on schizophrenia).

Analysis of the expression of the nucleotides can be used for disponsing the nucleotides on be used for disponsing the nucleotides on be used for disponsing the nucleotides. and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal New isolated nucleic acid molecule encoding a human angiomotin-like protein, useful for treating or preventing a disorder associated with decreased or increased expression or activity of AMLP1. New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies. Gaps human; angiomotin-like protein 1; AMLP1; cytostatic; gene therapy; 0; 4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; ve 0; Mismatches 3; Indels Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:245. Sequence 17 BP; 3 A; 6 C; 2 G; 6 T; 0 U; 0 Other; (AMSH ) AMERSHAM BIOSCIENCES SV CORP. Disclosure; Page 387; 771pp; French 816 expression of the nucleotides. 17 ADC37896 standard; DNA; 17 BP. 01-NOV-2002; 2002WO-US035129 01-NOV-2001; 2001US-0334773P. ilarity 82.4%; Conservative 1 GATCTGTTCTCCAACTC 800 GAGCTCTCCTCCAACTC (first entry) WPI; 2003-430501/40. Phan T; Local Similarity nes 14; Conserv WO2003037931-A2. Homo sapiens. 18-DEC-2003 08-MAY-2003 Shannon M, AMLPla; ss. ADC37896; Synthetic Query Match RESULT 528 Matches ADC37896 g à

; 0

Gaps

;

.;

```
g
         ð
                                                                                                                                                                                                                                                                                                                                                              ö
                                         The present invention describes the human angiomotin-like protein 1 (AMLP1). human AMLP1 has cytostatic activity, and can be used in gene therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and compositions of the present invention can be used for treating or preventing a disorder associated with decreased or increased expression or activity of AMLP1. The present sequence represents a scanning oligonucleotide for human AMLP1a, which is used in an example from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (AMLP1). human AMLP1 has cytostatic activity, and can be used in gene therapy. The AMLP1 protein, nucleic acid molecules, antibodies, and compositions of the present invention can be used for treating or preventing a disorder associated with decreased or increased expression or activity of AMLP1. The present sequence represents a scanning oligonucleotide for human AMLP1a, which is used in an example from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       protein, useful for treating or preventing a disorder associated with decreased or increased expression or activity of AMLP1.
                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       present invention describes the human angiomotin-like protein 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid molecule encoding a human angiomotin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       human; angiomotin-like protein 1; AMLP1; cytostatic; gene therapy;
                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                        4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human AMLP1a scanning 17-mer oligonucleotide SEQ ID NO:244.
                                                                                                                                                                                                                                                                                                                                                           3; Indels
                                                                                                                                                                                                                                                         Sequence 17 BP; 3 A; 4 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 3 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
Example 2; SEQ ID NO 245; 172pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; SEQ ID NO 244; 172pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
                                                                                                                                                                                                                                                                                                                                                                                                     776 TGAGGCAGCCCCTCTG 792
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 readdededecceacte 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADC37895 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-NOV-2002; 2002WO-US035129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-NOV-2001; 2001US-0334773P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                      14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-430501/40.
                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Phan T;
                                                                                                                                                                                                             present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003037931-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AMLPla; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shannon M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADC37895;
                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADC37895 Z

ID ADC37895 Z

XX ADC37895 Z

XX ADC37895 Z

XX ADC37895 Z

XX XX ADC3789 Z

XX XX ADC3789 Z

XX XX Z

XX XX Z

XX XX Z

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
à
                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, clentifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce suppression or reversion, apoptosis and or viral resistance, to produce combinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (AD) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cytostatic, antiviral, neuroprotective, nootropic, neuroleptic, ss;
primer, probe, tumour suppression, tumour reversion, apoptosis;
virus resistance, transgenic animals; Alzheimer's disease, schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     polypeptides can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.2%; Score 12.2; DB 1; Length 17; 12.4%; Pred. No. 5.5e+02; v.e 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumour suppression/reversion associated nucleotide #5664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  prognosis of these diseases. The nucleotides and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 8 A; 2 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 694; 771pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ξ
   791
                                                                 1 crakágagagaccacr 17
                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    896 TCTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82.4%;
775 CTGAGGGCAGCCCCTCT
                                                                                                                                                                                                                                            ADB45341 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 TCTCTGCTTCTCTGATC
                                                                                                                                                                                                                                                                                                                                                                                      18-DEC-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003040369-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diagnosis.
                                                                                                                                                                                                                                                                                                                 ADB45341;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  and/or
                                                                                                                                                                          RESULT 530
ADB45341/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

ö

Gaps

..

Query Match 4.2%; Score 12.2; DB 1; Length 17; Best Local Similarity 82.4%; Pred. No. 5.5e+02; Matches 14; Conservative 0; Mismatches 3; Indels

Matches

```
translocation; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                        Polynucleotides differentially regulated in response to cholesterol and adipogenesis are useful to detect and treat associated conditions such as obesity, athersclerosis, diabetes mellitus and coronary artery heart
                                                                                                                                                                                                                                                                                                                                                                                                                                The invention describes a composition comprising at least one expression vector comprising a polynucleotide of the invention. The composition has morectic, antiarteriosclerotic, cardiant and antidiabetic properties. The invention is used to detect and treat conditions associated with elevated cholesterol and lipid or during adipogenesis, particularly obsestly, athereclerosis, diabetes mellitus or coronary artery heart disease. This sequence represents a polynucleotide differentially expressed during cholesterol homeostasis and adipogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATA modulating factor; TMF; transcription; TATA box; promoter; HIV-1; human immunodeficiency virus-1; short arm; human chromosome 3; p12-p21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                 expression vector; anorectic; antiarteriosclerotic; cardiant; antidiabelic; elevated cholesterol; elevated lipid; adipogenesis; obesity; athersclerosis; diabetes mellitus; coronary artery heart disease; cholesterol homeostasis; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                             Cholesterol homeostasis/adipogenesis related DNA seg id 406.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.2%; Score 12.2; DB 1; Length 17; 82.4%; Pred. No. 5.5e+02; iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 5 A; 4 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                               Claim 8; SEQ ID NO 406; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ49399 standard; cDNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                            (LYNX-) LYNX THERAPEUTICS INC.
                                ADE31019 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                 08-JAN-2003; 2003US-00339793.
                                                                                                                                                                                                                                                                        09-JAN-2002; 2002US-0347286P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rereagecrereagare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(first entry)
                                                                           29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                              differntial expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TMF 1521-1538 probe.
                                                                                                                                                                                                                                                                                                                                      WPI; 2003-830986/77.
                                                                                                                                                                                                                                                                                                                 Bowen B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sest Local Similarity
                                                                                                                                                                                                        US2003180764-A1.
                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAR-2003
27-APR-1994
                                                                                                                                                                                                                             25-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ49399;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17
                                                      ADE31019;
                                                                                                                                                                                                                                                                                                                  Shang J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                           disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
            RESULT 531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ49399,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       q
```

```
The sequences given in AAQ49398-400 are probes which correspond to regions of the TATA modulating factor (TWF) gene. TWF is a protein of man. wt. 123-130 kD which activates transcription in most genes, esp. in human immunodeficiency virus-1 (HIV-1) by binding to the TATA box region of the promoter. TWF is encoded by the short arm of human chromosome 3 in patients having lung and other involved in trans- locations in the contract PW field.)
                                                                                                                                                                                                                                                                                                                                                                                  New protein cellular factor - capable of binding double stranded \rm HIV-1 tata region and activating gene expression of \rm HIV-LTR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Polymerase chain reaction; PCR; amplify; primer; D-segment; variable; heavy; domain; VH; region; J-segment; human; germline; back primers; cloning; vector; pHENI-V3; Vlambda3; light; chain; scFv; BSA; CDR3; thyroglobulin; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 10 A; 2 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 26; Page 51; 75pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          892 TACTICICAGCTICIGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91GB-00025579.
91GB-00025882.
92GB-00006318.
92GB-00006372.
92WO-GB001755.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ42925 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18 rrcrrrrcrecriciec 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            92WO-GB002240.
                                                                                                                                                                                           92US-00862025.
                                                                                                                                          93WO-US003077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                         (TEXA ) UNIV TEXAS SYSTEM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
                                                                                                                                                                                                                                                                                                                                           WPI; 1993-336836/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Primer CDRFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-DBC-1991;
02-DBC-1991;
24-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9311236-A1.
Homo sapiens
                                                                                                                                             31-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-DEC-1992;
                                              WO9320106-A1
                                                                                                                                                                                           02-APR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-0CT-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-JUN-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-MAR-1992;
23-SEP-1992;
                                                                                            14-OCT-1993.
                                                                                                                                                                                                                                                                                          Gaynor RB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAQ42925;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ42925
```

.. 0

G₩.

Grigg

(MEDI-)

(CAMB-)

Query Match

Matches

à

·.

Gaps

· 0

Indels

```
New substd. quinoline and quinazoline cpds. - are monomers for triple helix-forming oligo:nucleotide analogues useful e.g. for treating tumours or viral infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present sequence represents a triple helix forming oligonucleotide that form a triple helix with the double-stranded DNA sequence described in AAX15195. The specification describes novel monomeric compositions which are substituted quinoline or quinazoline-based structures capable of hydrogen bonding specifically with interstrand purine-pyrimidine pairs in a double stranded Watson-Cick DNA molecule to form a triple-helix. (Updated on 25-MAR-2003 to correct PF field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.2%; Score 12.2; DB 1; Length 18; 32.4%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18 BP; 0 A; 3 C; 0 G; 15 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                          quinazoline-based structure; hydrogen bonding; ss.
Pred. No. 5.9e+02;
); Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                      Double-stranded DNA; triple helix; quinoline;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                Triple helix forming oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Fig 1; 102pp; English.
                      0;
                                                            771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      844
                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18
                                                                                                  2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95US-00384324.
    ilarity 82.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT71737 standard; cDNA; 18
                                                        755 GGGTCCCTAGGCCTCCA
                                                                                                GGTCCCCAGTCCTCGA
                                                                                                                                                                                             AAX15196 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    828 TGTCTCTTTTCTTCTCT
                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 82.4
hes 14; Conservative
                                                                                                                                                                                                                                                                           (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NEBRASKA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1996-371338/37
  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09623777-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           UYNE-) UNIV
                      14;
                                                                                                                                                                                                                                                                       25-MAR-2003
28-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           08-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                              18
                                                                                                                                                                                                                                   AAX15196;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gold BI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAT71737
                                                                                                                                                        RESULT 535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 536
                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT71737
XX
XX
AC AAT7
XX
DT 26-1
XX
DE PUT:
XX
                                                                                                                                                                               AAX15196
                                                                                                                                                                                                               셤
                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Two primers (AAQ70161, AAQ70162) were used to amplify a sequence encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           an antigen from Japanese encephalitis virus for its use in the construction of chimeric proteins. The chimeric proteins comprise antigenic sites from Japanese encephalitis virus and Hepatitis B virus surface antigens. They may be used as multivalent vaccines. See also
                                                        Winter GP
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                              Prodn. of anti-self antibodies - using replicating genetic display
packages, i.e. AB repertoires displayed on phage.
                                                                                                                                                                                                                                               The sequences given in AAQ42925-26 are primers which were used in malyee the CDR3 length of thyroglobulin binding clones (see also AAQ42923-24). In thyroglobulin binding clones a CDR3 length of 10 residues was found. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Prodn. of chimeric proteins having antigenic sites from Japanese encephalitis virus and hepatitis B virus surface antigens - also recombinant baculovirus, useful as multivalent vaccine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chimeric; chimera; vaccine; multivalent; hepatitis B virus; HBV; hepatitis; Japanese encephalitis virus; baculovirus; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Primer for amplifying Hepatitis B virus antigen coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02;
                                                      Mccafferty J,
                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 3 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 3 A; 6 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (JAPG ) NIPPON ZEON KK.
(TOKS-) TOKYOTO SHINKEI KAGAKU SOGO KENKYUSHO ZH
                                                    Griffiths AD, Hoogenboom HRJM, Marks JD,
                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
              CAMBRIDGE ANTIBODY TECHNOLOGY
                                                                                                                                                                                                           Disclosure; Page 80; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 4; 13pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              753 CAGGGTCCCTAGGCCTC 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGGGTACCTTGGCCCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ70161 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92JP-00063699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92JP-00063699
MEDICAL RES COUNCIL.
                                                                                                                                                                                                                                                                                                                                                                                                                          14; Conservative
                                                                                                              WPI; 1993-197055/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1994-275516/34.
                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-APR-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JP06205672-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-MAR-1992;
```

Synthetic

AAQ70161;

0

Gaps

.; 0

Indels

Purification tag of a TGF-beta fusion protein encoding cDNA.

DB 1; Length 18;

Score 12.2;

4.28;

Query Match

AAQ70159-65

Mon Jul 12 11:21:14 2004

```
Prepn. of transforming growth factor-beta fusion protein - useful to reduce surgery recovery time and to prepare artificial skin.
Transforming growth factor-beta fusion protein; wound healing; artificial skin; surgery recovery time; ss.
                                                                                                                                                                                                     Disclosure; Page 40; 59pp; English.
                                                                                                                                                    Hall FL, Nimni ME,
                                                                                                                                                                WPI; 1997-043065/04.
P-PSDB; AAW18225.
                                                                                                               HALL F L.
NIMNI M E.
TUAN T.
                                                                                                                                        CHEUNG D T.
                                                                                                                                  WU L
                                                                                       05-JUN-1996;
                                                                                                    06-JUN-1995;
                                                              WO9639430-A1
                                                                           12-DEC-1996.
                                      mat_peptide
                   Synthetic
                                                                                                                                  (MULL/)
                                                                                                                (HALL/)
                                                                                                                     (NIMN/)
(TUAN/)
```

Cheung DT;

Wu L,

Tuan T,

95US-00470837. 96WO-US008973

/function= "Purification_tag"

ď

L. .18 /*tag=

Location/Qualifiers

comprises a purification tag and a TGF active fragment. The present sequence encodes a specifically claimed purification tag. Additionally, sequence encodes a specifically claimed purification tag. Additionally, the fusion protein may comprise proteinase-sensitive linker sites and binding domain so the protein sequence may contain some or all of the binding delements: purification tag:proteinase site:EWA binding cliesproteinase site:TGF-beta. TGF-beta promotes wound healing, and the proparation of artificial skin. The inclusion of a purification tag accilitates purification of the fusion protein. The proteinase site is included to permit cleavage and release of the purification tag after purification if desired. The extracellular matrix binding site is included to permit cleavage and release of the purification tag after purificated edlivery of the fusion protein to the desired site of action. Delivery of the TGF-beta required to be administered to be effective and reduces the ö concentration of circulating TGF-beta which may result in undesirable Gaps .. 0 Score 12.2; DB 1; Length 18; Pred. No. 5.9e+02; 3; Indels Sequence 18 BP; 6 A; 7 C; 0 G; 5 T; 0 U; 0 Other; Mismatches 0 915 ATTATCATCACCACCAC 931 18 4.2%; ATCATCATCATCAC 14; Conservative Query Match Best Local Similarity Matches

```
ਨੇ
```

AAV57517 standard; DNA; 18 BP. AAV57517; 537 AAV57517 RESULT g SEXEXEX SEXEXEX SEXEXEX

Zcytor7 cytokine receptor encoding cDNA amplifying outer nest primer.

(first entry)

20-NOV-1998

Zcytor7; cytokine receptor; ligand-binding polypeptide; kidney; pancreas; type 2 cytokine receptor family, CRF2; prostate tissue; nervous tissue; agonist; cell proliferation; cell differentiation; renal disease; human; neural disease; pancreatic disease; PCR primer; ss.

Novel human Zcytor7 DNA encodes a type 2 cytokine receptor - useful for treating renal, neural, pancreatic and prostatic diseases. Farrah TM; Adams RL, Whitmore TE, Example 1; Page 62; 72pp; English. Kho CJ, Jelmberg AC, 98WO-US003029. 97US-00803305. (ZYMO ) ZYMOGENETICS INC. WPI; 1998-480798/41. Homo sapiens WO9837193-A1 18-FEB-1998; 20-FEB-1997; 02-OCT-1997; 27-AUG-1998. Synthetic. Lok S, 

Sequences shown in AAV57517 to AAV57524 represent primers used for the PCR amplification of the CDNA encoding the Zcytor7 cytokine receptor. Zcytor7 is a ligand-binding receptor polypeptide and is a novel member of the type 2 cytokine receptor family (GRF2). An expression vector containing the Zcytor polymorlective, operably linked to transcription promoter, a sequence encoding a transmembrane and intracellular domain, or both, and a transcriptional terminator can be used to transform host cells for the recombinant production of the polypeptide. The sequences can be used to study the Zcytor7 gene and to isolate ligands binding to it. Zcytor7 is preferentially expressed in the Kidney, pancreas, prostate proliferation and differentiation of cell in these organs. The antagonists and agonists of Zcytor7 can be used to stimulate antagonists and agonists can also be used in the treatment of renal, neural, pancreatic and prostate diseases

Gaps ., Length 18; Indels Seguence 18 BP; 0 A; 3 C; 6 G; 9 T; 0 U; 0 Other; Score 12.2; DB 1; Pred. No. 5.9e+02; Mismatches ., 4.2%; Query Match
Best Local Similarity 82.4
Matches 14; Conservative

.. 0

836 BP. 17 1 ecresererricitri AAV46236 standard; DNA; 18 820 GTTGGCTGTGTCTCTTT (first entry) Human HLA-A primer #98. 16-OCT-1998 AAV46236; RESULT 538 AAV46236 à q

Histocompatibility locus antigen; HLA-A class I; human; class typing; donor; host; tissue transplantation; primer; ss. Homo sapiens. WO9826091-A2. 18-JUN-1998. Synthetic. 

```
97WO-CA000955.
                                                                                                                              (VISI-) VISIBLE GENETICS INC.
                                                                             96US-00766189
                                                                                                                                                                                       Leushner J;
                                                                                                                                                                                                                                             WPI; 1998-348544/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-112272/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (BECT ) BECTON
                                                                       12-DEC-1996;
                                                                                                                                                                                    Blasczyk RH,
                      12-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUL-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EP823484-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-FEB-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV16799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               You O;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 539
AAV16799/C
ID AAV16799/C
XX
AC AAV1-
XX
XX
XX
XX
XX
XX
XX
Synch
Synch
XX
Synch
XX
Synch
XX
Synch
Syn
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
```

0 AAV46054 and AAV46200-V46264 are primers used in isolating human histocompatibility locus antigen (HLA-A) Class I alleles which are used in a novel method of HLA Class I typing. The method involves combining a group-specific untranslated region primer pair with a target DNA to allow primer-based amplification of the DNA, and determining whether a nucleic pair produced by the amplification. The ability of the primer pair to produce a product is associated with a particular HLA group type. The methods can be used for typing the 3 classical HLA class I genes The methods can loci HLA-A, HLA-B, and HLA-C) in e.g. donors and hosts for tissue transplantation. The initial group specific amplification allows a PCR based separation of haplotypes in 95% of patient samples. The subsequent sequencing can provide for high-resolution typing HLA Class I  $t_{\rm YP}$ ing - by primer-based amplification of target DNA using group-specific untranslated region primer pair. Gaps . 0 4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; 3; Indels Sequence 18 BP; 3 A; 7 C; 6 G; 2 T; 0 U; 0 Other; 0; Mismatches Claim 8; Page 133; 185pp; English. Local Similarity 82.4

744 GTAGGGTCCCAGGGTCC 760 GCAGGGTCCCCAGGTCC 17

AAV16799 standard; DNA; 18 BP. (first entry)

PCR primer for identification of Mycobacterium kansasii KATS1 DNA

Arbitrarily primed PCR reaction; Mycobacterium kansasii; KATS1; species-specific detection; hybridisation assay; PCR primer; amplify; ss.

Mycobacterium kansasii.

97EP-00112014.

96US-00682218

DICKINSON CO

Mycobacterium kansasii oligo:nucleotide - useful in detection of typical and atypical strains in, e.g. HIV patients.

A method has been developed of defining a set of compounds that modulate the expression of a target nucleic acid (tNA) sequence via binding of the compounds with the tNA sequence. The method comprises generating a library of virtual compounds in silico according to defined criteria, and

Example 18; Page 97; 264pp; English.

```
ó
                               primers AAV16798-99 are used in an arbitrarily primed PCR reaction to
                                       identify Mycobacterium kansasii KATS1 DNA sequences. KATS1 is a DNA kansasii specific. Mycobacteria other than M. kansasii specific. Mycobacteria other than M. kansasii specific. Mycobacteria other than M. kansasii samples. The KATS1 PCR product strains (see AAV16800-801) was cloned, and used to design more PCR primers and probes. Species-specific detection of M. kansasii nucleic acids can be performed by hybridising a probe to the nucleic acids and detecting the hybridisation. Alternatively, the nucleic acids can be mypridised to an amplification primer, and optionally a sequence for amplifying target nucleic acid. The amplified nucleic acids are detected. KATS1, and derived primers and probes, are used in highly specific nucleic acid hybridisation assays for detection of both typical and artypical strains M. kansasii which is an opportunist pathogen of HIV-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Identifying compounds which modulate expression of nucleic acids, used to provide compounds having defined physical, chemical or bioactive
                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Brooks DG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human RhoC phosphorothioate antisense oligonucleotide SEQ ID NO:153.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Identification; genetic target; gene modulation; human; probe; antisense oligonucleotide; phosphorothioate; PCR primer; nucleotide sequence-based technology; antisense drug discovery;
                                                                                                                                                                                                                                                                                                                                                      ·,
                                                                                                                                                                                                                                                                                                                   4.2%; Score 12.2; DB 1; Length 18; larity 82.4%; Pred. No. 5.9e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sasmor HM,
                                                                                                                                                                                                                                                      infected and other immunologically compromised patients
                                                                                                                                                                                                                                                                                  Sequence 18 BP; 1 A; 7 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Freier SM,
Vickers TA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          properties, e.g. antisense activity.
Disclosure; Page 4; 30pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Baker BF, Mcneil J,
tt JR, Borchers AH,
                                                                                                                                                                                                                                                                                                                                                                                  725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99WO-US008268.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0081483P.
98US-00067638.
                                                                                                                                                                                                                                                                                                                                                                                709 GAGTCCCAGGAGAGTGA
                                                                                                                                                                                                                                                                                                                                                                                                              17 gagraccagagagaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ41001 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      target validation; ss.
                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . LM, Banc.
C. Wyatt JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-620446/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9953101-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-0CT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ41001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cowsert Li
Ohasi C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 540
Š
                                                                                                                                                                                                                                                                                                                                                                                                            a
```

Mon Jul 12 11:21:14 2004

evaluating in silico the binding of the virtual compounds with the tNA according to defined criteria. Also described are: (1) a method of according to defined criteria. Also described are: (1) a method of a tNA sequence to foligonucleotides (NNS) that modulate the expression of a tNA sequence via binding of the ONS with the tNA sequence comprising conteria, and evaluating in silico the binding of the virtual ONS with the tNA according to defined criteria, and (2) a method of defining a set of compounds that modulate the expression of a tNA sequence via binding of the compounds with the tNA. The methods can be used for the generation and identification of synthetic compounds having defined physical, chemical or bioactive properties. Information gathered from assays of such compounds is used to identify nucleic acid sequences that are tractable to a variety of nucleotide sequence-based technologies, e.g. antisense drug discovery and target validation. AAZ40852 to AAZ41220, and ANX52001 to AAX52106, represent sequences used in the exemplification of the present invention

Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;

Gaps ., Length 18; 3; Indels 4.2%; Score 12.2; DB 1; 82.4%; Pred. No. 5.9e+02; tive 0; Mismatches 3; 873 CACTITICCIGAGAIGCA 889 1 cacrirccrereaecca 17 14; Conservative Query Match Best Local Similarity Matches a ò

. 0

RESULT

AAZ41063 standard; DNA; 18 BP AAZ41063

AAZ41063;

26-JAN-2000 (first entry)

Human ELK-1 phosphorothioate antisense oligonucleotide SEQ ID NO:215 

Identification; genetic target; gene modulation; human; probe; antisense oligonuclectide; phosphorothicate; PCR primer; nuclectide sequence-based technology; antisense drug discovery; target validation; ss.

Homo sapiens.

WO9953101-A1

21-OCT-1999.

99WO-US008268. 13-APR-1999; 98US-0081483P. 98US-00067638. 13-APR-1998; 28-APR-1998;

(ISIS-) ISIS PHARM INC.

Brooks DG; Sasmor HM, Freier SM, Vickers TA; Baker BF, Mcneil J, Wyatt JR, Cowsert LN Ohasi C,

WPI; 1999-620446/53.

40 Identifying compounds which modulate expression of nucleic acids, used provide compounds having defined physical, chemical or bioactive properties, e.g. antisense activity.

Example 24; Page 104; 264pp; English.

A method has been developed of defining a set of compounds that modulate the expression of a target nucleic acid (tNA) sequence via binding of the compounds with the tNA sequence. The method comprises generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual compounds with the tNA

```
0
according to defined criteria. Also described are: (1) a method of defining a set of oligonuclectides (ONs) that modulate the expression of a tNA sequence via binding of the ONs with the tNA sequence comprising generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual ONS with the LNA according to defined criteria; and (2) a method of defining a set of compounds that modulate the expression of a tNA sequence via binding of the compounds with the tNA. The methods can be used for the generation and identification of synthetic compounds having defined physical, chemical or bioactive properties. Information gathered from assays of such compounds is used to identify nucleic acid sequences that are tractable to a variety of nucleotide sequence-based technologies, e.g. antisense drug discovery and target validation. AAZ40852 to AAZ41220, and AAX52701 to AAX52701 to AAX52200 if the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Proteinase site; bone morphogenetic fusion protein; bone binding site; bone morphogenetic protein; transforming growth factor beta; active fragment; wound healing; bone growth; purification tag; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New bone morphogenetic fusion proteins - comprising a purification tag and a bone morphogenetic active fragment, used for enhancing wound healing or bone growth.
                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                     Query Match
4.2%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cDNA encoding a peptide comprising a purification tag.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag= a
/note= "encodes a purification tag"
                                                                                                                                                                                                                                                                         Sequence 18 BP; 5 A; 8 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shors EC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 37; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Han B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV99371 standard; cDNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                            926 CACCACCTCCAGAGAA 942
                                                                                                                                                                                                                                                                                                                                                                                                          1 caccaccarcccrcaaa 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98WO-US011189.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97US-00868452.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ΜĽ
                                                                                                                                                                                                                                        the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-059875/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nimni ME, Hall FL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HAN B.
SHORS E C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (NIMN/) NIMNI M E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HALL F L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               P-PSDB; AAW84203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-JUN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9855137-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-DEC-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV99371;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (HALL/)
(WULL/)
(HANB/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SHOR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV99371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                            ð
```

ö

```
The present invention describes the isolation of nucleic acid (I) that encodes a protein (II) having a signal peptide (SP), which comprises isolating RNA molecules (III) that are associated with microsomes under conditions where (III) is at least partly translated. Also described are: (1) a library of (I) encoding (II) comprising SP, (2) (I) isolated by the above method; and (3) (II) encoded by (I). (I) and (II) are useful therapeutically, typically (II) are cell growth factors such as cycckines, interleukins, colony-forming factors, possibly useful in treatment of cancer. (I) are also used: as tissue and molecular weight concerns as thromosome tags; to detect possible genetic disorders; as shromosome tags; to detect possible genetic disorders; as chromosome anibodies; and in interaction trap assays to fingerprinting; to generate anibodies; and in interaction trap assays to screening, for raising antibodies (e.g. for use as immunosasy reagents) and to induce an immune response. The method is more efficient and reliable than the sequence trap system. It does not involve formation of a fusion protein (rather natural proteins are selected) and (II) do not
The present sequence encodes a peptide comprising a purification tag that was used in the creation of the bone morphogenetic fusion proteins of the invention. The bone morphogenetic fusion protein may contain some or all of the following elements: a purification tag, a proteinase site, an ECM/bone binding site, a second proteinase site, and a bone morphogenetic protein active fragment. The fusion proteins of the invention also includes proteins that have transforming growth factor beta active fragments instead of bone morphogenetic protein active fragments. The bone morphogenetic protein active fragments. The bone morphogenetic protein active fragments.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Isolating nucleic acids encoding proteins comprising a signal peptide - by translating RNA and isolating translated RNA that is associated with microsomes, useful as therapeutic agents.
                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                       4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Secreted protein; microsome; signal peptide; PCR primer; ss.
                                                                                                                                                                                                                                                           Sequence 18 BP; 6 A; 7 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Follistatin protein PCR forward primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 33; 45pp; English
                                                                                                                                                                                                                                                                                                                                                                                                    915 ATTATCATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                           2 Arcarcarcarcac 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX19393 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98WO-US015394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97US-0053586P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kinoshita N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                     14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (HARD ) HARVARD COLLEGE
                                                                                                                                                                                                             or bone growth
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-153316/13.
                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kirschner MW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9905256-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX19393;
                                                                                                                                                                                                             healing
                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX19393,
  ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                             d
```

```
.;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٥;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  is useful for treating an animal, particularly humans, having or being prone to a disease or condition associated with the expression of G-alpha
  sequence represents a PCR primer which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           inhibits the expression of the human G-alpha-13 protein. The antisense compounds of the invention are of 8 to 30 nucleobases in length, that inhibits the expression of the human G-alpha-13. The antisense compound
                                                                                                                                                                                                                                                                                                                                      G-alpha-13; human; inhibitor; cancer; antisense compound; therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence represents an antisense inhibitor of the invention, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                    Gaps
                                                                                                    ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Antisense compound inhibiting expression of human G-alpha-13.
                                                                        Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 18; 12.4%; Pred. No. 5.9e+02;
                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                            Human G-alpha-13 antisense inhibitor ISIS# 20750.
                                          Sequence 18 BP; 5 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP; 2 A; 5 C; 4 G; 7 T; 0 U; 0 Other;
have to be secreted. The present sequence repressis used in an example from the present invention
                                                                       4.2%; Score 12.2; DB 1; 32.4%; Pred. No. 5.9e+02;
                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 11; Col 39; 38pp; English.
                                                                                                                            875 CTTTCCTGAGATGCACT 891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            726
                                                                                                                                                                                                                          AAZ31801 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BB
                                                                                                                                                        7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-00205860.
                                                                                    82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82.48;
                                                                                                                                                      CTTTCCAGCGCTGCACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            710 AGTCCCAGGAGAGTGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX38061 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 AGTCCAAGGAGATCGAC
                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                 Local Similarity 82.4 les 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-633376/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -13, such as cancer
                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SISI (-SISI)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-DEC-1998;
                                                                                                                                                                                                                                                                                24-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                           US5981732-A
                                                                                                                                                                                                                                                                                                                                                                                                                                       09-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cowsert LM
                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                      18
                                                                        Query Match
                                                                                                                                                                                                                                                      AAZ31801;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX38061;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                    Best Loca
Matches
                                                                                                                                                                                             RESULT 544
                                                                                                                                                                                                             AAZ31801/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX38061
ID AAX3
  SX 33 33
                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
```

```
The present invention describes a method using novel primers involving the PCR-based determination of histocompatibility locus antigen B (HLA-B) class I group type. Determining the HLA-B class I group type of a subject comprises: (i) combining a group-specific untranslated region primer pair with a target DNA sample from the subject under conditions such that primer-based amplification of the target DNA may occur; and (ii) determining whether a nucleic acid product is produced by the amplification; where the ability of the primer pair to produce a nucleic amplification; where the ability of the primer pair to produce a nucleic and product is associated with a particular HLA group type. The method can be used for HLA-B typing. In the method, the initial group specific amplification allows a PCR based separation of haplotypes in 95% of patient samples. It permits the resolution of cis/trans linkages of patient samples. It permits which cannot be achieved with other protocols. AAX37845 to AAX38286 represent DNA sequence used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human ELK-1; p62TCF; Ets domain transcription factor protein; apoptosis; expression inhibition; infection; inflammation; tumour formation; diagnosis; phosphorothioate; antisense compound; ss.
                                               Human, histocompatibility locus antigen; HLA; determination; allele; HLA-B typing; PCR; HLA class I; cis/trans linkage resolution; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                   Determination of HLA class I group type of a subject - using group specific untranslated region primer pair.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 12.2; DB 1; Length 18; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 3 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
              HLA-A specific exon region primer SEQ ID NO:217.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example; Page 21; 195pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ELK-1 expression modulator #18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ06579 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.2%;
                                                                                                                                                                                                                           98WO-CA000768.
                                                                                                                                                                                                                                                            97US-00909290.
                                                                                                                                                                                                                                                                                             (VISI-) VISIBLE GENETICS INC. (BLAS/) BLASCZYK R H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            744 GTAGGGTCCCAGGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGGTCCCCAGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                               Leushner J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-167446/14.
                                                                                                                                                                                                                                                                                                                                               Blasczyk RH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-NOV-1999
                                                                                                                      Homo sapiens,
                                                                                                                                                                                                                           11-AUG-1998;
                                                                                                                                                                                                                                                          11-AUG-1997;
                                                                                                                                                      W09907883-A1
                                                                                                                                                                                         18-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic.
                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ06579;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAZ06579
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
Sequences AAZ06571-Z06607 are antisense polynucleotides targeted to a nucleic acid molecule encoding human ELK-1 (also known as p62TCF). ELK-1 is a member of the terranzy complex factor subfamily of Ets-domain transcription factor proteins. The polynucleotides inhibit the expression of human ELK-1, and this sequence targets the coding region of the ELK-1 RNA. Sequences AAZ06571-Z06607 all cause at least 30% inhibit to of ELK-1 expression. The antisense sequences can be used to inhibit the expression of human ELK-1 in human cells or tissues in vitro. ELK-1 uses a bipartite recognition mechanism mediated by both protein-DNA and protein-protein interactions to regulate genes by direct and indirect DNA binding and has been shown to control various signal transduction pathways and other cell functions including apoptosis. This means that antisense compounds with its expression of ELK-1 can be used to treat diseases associated with its expression in animals, particularly humans and to prevent or delay infection, inflammation or tumour formation. The compounds can also be used for diagnosis, as research reagents and in kits
                                                                   /*tag= b
/note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
except cytosine residues which are 5-methylcytosine"
                                                                                                                                        /*tag= c
/note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
/note= "Optionally 2-methoxyethyl (2'-MOE) nucleosides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Fusion protein; Bacillus; cell wall protein; promoter; cleavage site; TEV protease; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Hexa(his) oligonucleotide for MWPsp-MWPmp10-(His)6-linker-Met-ProIns.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense compound useful for diagnosis, treatment and prevention of disease associated with \rm ELK-1 expression.
                                                                                                                                                                          except cytosine residues which are 5-methylcytosine
              *tag= a
note= "Internucleoside phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.2%; Score 12.2; DB 1; Length 18; 22.4%; Pred. No. 5.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 5 A; 8 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 3; Col 38; 31pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17
                                                                                                                                                                                                                                                                                    98US-00213767.
                                                                                                                                                                                                                                                                                                                      98US-00213767.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         926 CACCACCTCCAGAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 caccaccarccerda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ59167 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity 82.4
Matches 14; Conservative
                                                                                                                     15. .18 /
/*tag= c
. .18
*tag=
                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                             Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-517959/43.
modified_base
                                                  modified base
                                                                                                                         modified base
                                                                                                                                                                                                                                                                                      17-DEC-1998;
                                                                                                                                                                                                                                                                                                                        17-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-APR-2000
                                                                                                                                                                                                                 US5948680-A.
                                                                                                                                                                                                                                                   07-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                             Baker BF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ59167;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ59167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          d
```

o,

;

Gaps

·;

·,

Gaps

;

```
A DNA coding a new fused protein and preparation of a useful peptide through its expression.
                                                                                                                          Example 1; Page 8; 43pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ΕÌ
                                                                                                                                                                                     via a cleavable linker sequence
                                                                                                                                                                                                                                           931
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kudo
                                                                                                                                                                                                                                                  || ||||||||| || ||| ATCATCATCATCAC 18
                                                                                                                                                                                                                                                                                         BP
                                99JP-00089488
                                             98JP-00087339
                                                                                                                                                                                                                                                                                                                                                                                                       99JP-00089488
                                                                                                                                                                                                                                                                                                                                                                                                                    98JP-00087339
                                                                                                                                                                                                                                         915 ATTATCATCACCACCAC
                                                                                                                                                                                                                                                                                         18
                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                   TEV protease; PCR primer;
                                                         (ITOH-) ITOHAM FOODS INC
                                                                                                                                                                                                                              Conservative
                                                                             Higashikuni N,
                                                                                                                                                                                                                                                                                                                                                                                                                                (ITOH-) ITOHAM FOODS INC (UDAK/) UDAKA S.
                                                                                                                                                                                                                                                                                        AAZ59168 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Higashikuni N,
                                                                                                              chrough its expression
                                                                                          WPI; 2000-101697/09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-101697/09
                                                                                                                                                                                                                      Local Similarity
                                                                UDAKA S.
                                                                                                                                                                                                                                                                                                                                           Fusion protein;
     JP11341991-A.
                                30-MAR-1999;
                                             31-MAR-1998;
                  14-DEC-1999
                                                                                                                                                                                                                                                                                                                  20-APR-2000
                                                                                                                                                                                                                                                                                                                                                                            JP11341991-A
                                                                                                                                                                                                                                                                                                                                                                                                      30-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                    31-MAR-1998;
                                                                                                                                                                                                                             14;
                                                                                                                                                                                                                                                                                                                                                                                         14-DEC-1999.
                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                    AAZ59168;
                                                                 (UDAK/)
                                                                             Sato S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sato S,
                                                                                                       DNA
                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                          ò
```

```
This invention describes a novel process for the production of a structure differentiation protein which recognises and binds with a protein having normal structure without recognising a protein having abnormal structure. The process comprises: (1) affinity chromatography of a solution containing above mentioned structure differentiation protein adsorbed fraction; (3) affinity chromatography of the cluste using a geloupled with the normal structure protein; (2) elution of the coupled with the abnormal structure protein; and (4) recovery and isolation of the structure differentiation protein in the eluate, or vice versa steps. This sequence represents a primer used in the method of the
                                                                              comprising a Bacillus species cell wall protein fused to a cleavage peptide and a heterologous protein. The fusion construct is placed downstream of a Bacillus species promoter sequence. This sequence represents a reverse oligonucleoxide coding for the (His)6 part of the construct MWPsp-MWPmpin-(His)6-Linker-Met-ProInsulin. This construct comprises the Bacillus brevis middle wall protein mp10 linked to the proinsulin protein via a cleavable linker sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Primer; structure differentiation protein; affinity chromatography; ss.
                                                     invention relates to a DNA construct encoding a fusion protein
                                                                                                                                                                                                                                                                                     4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A process for prodn. of a structure differentiation protein.
                                                                                                                                                                                                                                             Sequence 18 BP; 5 A; 0 C; 7 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 13; 18pp; Japanese.
                     Example 1; Page 8; 43pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                        931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98JP-00093714.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98JP-00093714.
                                                                                                                                                                                                                                                                                                                                                                  915 ATTATCATCACCACCAC
                                                                                                                                                                                                                                                                                                                                                                                                          17 Arcarcarcarcac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ24159 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 entry)
                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RITS-) GH RITSUMEIKAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-016978/02
                                                                                                                                                                                                                                                                                                      Local Similarity
es 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VH3 DP-32 primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JP11290076-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ24159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 549
                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ24159
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
                                                                                                                                                                                                                                                                                                                                                                                                          The invention relates to a DNA construct encoding a fusion protein comprising a Bacillus species cell wall protein fused to a cleavage peptide and a heterologous protein. The fusion construct is placed downstream of a Bacillus species promoter sequence. This sequence represents an oligonucleotide coding for the (His)6 part of the construct MWPsp-MWPmpl0-(His)6-Linker-Met-ProInsulin. This construct comprises the Bacillus brevis middle wall protein mp10 linked to the proinsulin protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ..
                                                                                                                                                                                                                                                                                                               coding a new fused protein and preparation of a useful peptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bacillus; cell wall protein; promoter; cleavage site;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hexa(his) oligonucleotide for MWPsp-MWPmp10-(His)6-linker-Met-ProIns.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 6 A; 7 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                         Kondo
                                                                                                                                                                                                                                     Kudo T,
```

·;

Gaps

;

Length 18; Indels

Score 12.2; DB 1; Pred. No. 5.9e+02; 0; Mismatches 3;

.; 0

14; Conservative

Matches

4.2%;

Query Match Best Local Similarity

Ξ

Kondo

769

753 CAGGGTCCCTAGGCCTC

à

Sequence 18 BP; 3 A; 7 C; 5 G; 3 T; 0 U; 0 Other;

```
g
```

```
Detecting microsatellite markers in the human genome comprising the use of a polynuclectide primer, useful for detecting trinuclectide repeat expansion mutations causing neurological disorders.
                                                                                                                        Human; microsatellite marker; PCR primer; repeat length polymorphism; expansion mutation; neuropsychiatric disorder; schizophrenia; autism; bipolar affective disorder; panic disorder; brain; detection; DRPLA; neurological disorder; dentatorubal pallidoluysian atrophy; spinocerebellar ataxia; trinucleotide repeat; ss.
                                                                                                     Human cDNA library clone P32D9 microsatellite marker PCR primer #2.
                                                                                                                                                                                                                                                                                                                    Li WB;
                                                                                                                                                                                                                                                                                                                    Nisson PB,
                                                                                                                                                                                                                                                                                                                                                                                                 Claim 6; Page 28; 32pp; English.
                                               AAA53054 standard; DNA; 18 BP
CAGGGTACCTTGGCCCC 17
                                                                                                                                                                                                                                                99WO-US025119.
                                                                                                                                                                                                                                                                   98US-0105885P.
99US-00105885
                                                                                                                                                                                                                                                                                                SNINGO NINU ( OCYU)
                                                                                       15-SEP-2000 (first entry)
                                                                                                                                                                                                                                                                                                                    Margolis R, Ross C,
                                                                                                                                                                                                                                                                                                                                       WPI; 2000-350770/30.
                                                                                                                                                                                                         WO200024938-A2.
                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                  27-OCT-1999;
                                                                                                                                                                                                                                                                    27-OCT-1998;
                                                                                                                                                                                                                                                                               26-OCT-1999;
                                                                                                                                                                                                                              04-MAY-2000
                                                                     AAA53054;
                               RESULT 550
                                        AAA53054
```

The present invention describes a polymucleotide (NI) is complementary to contiguous nucleotides within 500 nucleotides of a trinucleotide repeat.

The microsatellite marker is selected from P12A7, P12B1, P32B10, P expansion mutations causing diseases such as neurological disorders e.g. dentatorubal pallidoluysian atrophy (DRPLA), spinocerebellar ataxia type 2, 3 and 4, autism, schizophrenia and bipolar affective disorder. AAA53069 to AAA53076 represent PCR primers used in an example from the The present invention describes a polynucleotide (N1) for detecting a present invention

Sequence 18 BP; 2 A; C; 10 G; 2 T; 0 U; 0 Other;

0

```
Score 12.2; DB 1; Length 18;
Pred. No. 5.9e+02;
0; Mismatches 3; Indels
       4.2%;
        Query Match
Best Local Similarity 52.4
Matches 14; Conservative
```

RESULT 552 AAZ70911/c

;

Gaps

; 0

```
Antisense compound for diagnosis and treatment of infection, inflammation and tumor formation is targeted towards the nucleic acid encoding a member of serine/threonine family of kinases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes antisense compounds of about 8-30 nucleotides in length targeted to the 5' UTR (untranslated region), 3' VTR or coding region of the nucleic acid encoding human Akt-2, which inhibits the expression of human AKT-2. Human Akt-1 is a member of the Akt/PKB family of serine/threonine kinases. The antisense compounds have antiinflammatory, cytostatic and antiiffectious activities, and can used in gene therapy. They are useful in inhibiting the expression of human Akt-2 by contacting the cells or the tissues in vitro. They can also be used for diagnosis and treatment of infection, inflammation and tumour formation, and for prophylaxis. The present sequence represents a human Akt-2 phosphorothioate anisense oligonucleotide used in the
                                                                                                                                                                                                                                              Human, Akt-2; antisense oligonucleotide; phosphorothioate; inhibition;
serine/threonine kinase; antiinflammatory; cytostatic; antiifectious;
gene therapy; infection; inflammation; tumour; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                Human Akt-2 phosphorothioate antisense oligonucleotide SEQ ID NO:41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                           /*tag= a
/note= "phosphorothioate linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 18 BP; 1 A; 6 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 3; Col 38; 30pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              704 CCAGCGAGTCCCAGGAG 720
781 GCAGCCCCTCTGGTGCC 797
                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 CCAGCGATGCCAAGGAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99US-00256465.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99US-00256465
                                N
                                                                                                                     AAA08488 standard; DNA; 18
                                 18 GCAGCCCATCTCGCGCC
                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-270345/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                             Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-FEB-1999;
                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-FEB-1999;
                                                                                                                                                                                         17-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                US6043090-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-MAR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Monia BP,
                                                                                                                                                       AAA08488;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                       RESULT 551
                                                                                                         AAA08488/
                                                                                                                                                       ð
```

AAZ70911 standard; DNA; 18 BP

```
invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3157, 3227, 3297 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ65654 to AAZ69578 represent human biallelic markers from the present
                                                                                     Human biallelic marker upstream amplification primer SEQ ID NO:5267.
                                                                                                                  Human genome, biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 8; Page 1354; 2745pp; English.
                                                                                                                                                                                                                                                                                                                             98US-0082614P.
98US-0109732P.
                                                                                                                                                                                                                                                                                                   99WO-IB000822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               957/c
AAZ72957 standard; DNA; 18
                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                       Cohen D, Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2000-013267/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present invention
                                                                                                                                                                                                                                                                                                                                                                          (GEST ) GENSET
                                                                                                                                                                                diagnosis; ss
                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                        WO9954500-A2
                                                                                                                                                                                                                                                                                                   21-APR-1999;
                                                                                                                                                                                                                                                                                                                                            23-NOV-1998;
                                                            10-SEP-2001
                                                                                                                                                                                                                                                                     28-OCT-1999
                              AAZ70911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ72957;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

Chumakov I;

Gaps . Length 18; 3; Indels Sequence 18 BP; 8 A; 0 C; 8 G; 2 T; 0 U; 0 Other; Score 12.2; DB 1; Pred. No. 5.9e+02; 0; Mismatches 3; . 906 4.28; N 890 CTTACTTCTCAGCTTCT criccircccarcircr 14; Conservative

10-SEP-2001 (first entry)

BP

Human biallelic marker upstream amplification primer SEQ ID NO:7313.

AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ6959 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the pharmaceutical agents acting on a disease as well as other treatment.

N. B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3157, 3227, 3297 and 3007, are not actually given a sequence in the Sequence Listing from the Novel biallelic markers used to construct a high density disequilibrium genomic map, haplotype, phenotype, polymorphic base, genotyping, haplotyping, hybridisation, identification, characterisation, amplification, single nucleotide polymorphism, SNP, PCR primer, Human genome, biallelic marker, high density disequilibrium map, genomic map, haplotype: nhenorume. Sequence 18 BP; 5 A; 2 C; 7 G; 4 T; 0 U; 0 Other; Chumakov I; Claim 9; Page 1790; 2745pp; English. 99WO-IB000822 98US-0082614P Blumenfeld M, map of the human genome WPI; 2000-013267/01. present invention (GEST ) GENSET. diagnosis; ss Homo sapiens W09954500-A2. 21-APR-1999; 23-NOV-1998; 28-OCT-1999 Cohen D, NAMES OF COLOR COL

ö Gaps 0; Score 12.2; DB 1; Length 18; Pred. No. 5.9e+02; 0; Mismatches 3; Indels . 0 ch 4.2%; l Similarity 82.4%; 14; Conservative ( Local Similarity Query Match Matches ð

948 932 CCTCCAGAGAATTTTAC ccrcccrcaarrraac 18

d

Human biallelic marker downstream amplification primer SEQ ID NO:11532. (first entry) 10-SEP-2001 AAZ77176;

BP.

AAZ77176 standard; DNA; 18

554

RESULT 55 AAZ77176

. 0

Human genome; biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; genotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer; diagnosis; ss 

Homo sapiens.

O'malley BW;

Bennett CF,

Cowsert LM,

```
.
0
                                                                                                                                                                                                                                                                                          AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their mucleotide sequences. AAZ69579 to AAZ77440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the man genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, SRA; steroid receptor RNA activator; cytostatic; antiinflammatory; SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from pharmaceutical agents acting on a disease as well as other treatment. N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                     Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.2%; Score 12.2; DB 1; Length 18; 12.4%; Pred. No. 5.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 7 A; 2 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Antisense oligonucleotide ISIS# 30281.
                                                                                                                                                               Chumakov I;
                                                                                                                                                                                                                                                                  Claim 9; Page 2689; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (ISIS-) ISIS PHARM INC.
(BAYU ) BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-00280409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-00280409
                                                           99WO-IB000822.
                                                                                     98US-0082614P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 706 AGCGAGTCCCAGGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTGAGTCCAAAGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA92571 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                               Blumenfeld M,
                                                                                                                                                                                                                                          map of the human genome
                                                                                                                                                                                           WPI; 2000-013267/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                   (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-MAR-1999;
                                                         21-APR-1999;
                                                                                        21-APR-1998;
                                                                                                     23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-AUG-2000
 WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US6107092-A
                             28-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA92571;
                                                                                                                                                                Cohen D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA9257.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
```

```
..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense compounds targeted to steroid receptor RNA activator useful for diagnosis, prophylaxis and treatment of diseases associated with the steroid activator, such as infection, inflammation or tumor formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; SRA; steroid receptor RNA activator; cytostatic; antiinflammatory; SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
                                                                 for
                                                                                                                                                                 The present sequence is one of a large number of antisense oligonucleotides which is directed against one of four human steroid receptor RNA activator (SRA) nucleic acid sequences. Two series of antisense oligonucleotides were synthesised. The first series comprised 30 oligodeoxynucleotides when a phosphorothicate backbone. The second series comprised chimeric oligonucleotides composed of a central gap series comprised chimeric oligonucleotides, which was flanked on both sides by four-nucleotide wings. The wings were composed of 2'-methoxyethyl (2'-MOE) nucleotides. Both series contained the same mucleotide sequences. The antisense compounds are useful for research, diagnosis, treatment and prophylaxis to prevent or delay infection, inflammation or tumour formation. Therapeutically the oligonucleotides are highly safe and are effectively administered to humans
                                                             Antisense compounds targeted to steroid receptor RNA activator useful diagnosis, prophylaxis and treatment of diseases associated with the steroid activator, such as infection, inflammation or tumor formation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present sequence is one of a large number of antisense oligonucleotides which is directed against one of four human steroid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.2%; Score 12.2; DB 1; Length 18; 12.4%; Pred. No. 5.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 BP; 6 A; 7 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    O'malley BW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antisense oligonucleotide ISIS# 30363.
                                                                                                                                         Example 16; Col 41; 47pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
(BAYU ) BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 3; Col 42; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841 CTCTGAAGACAGCGTCC 857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-00280409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-00280409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA92641 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 crcreaaaacaeacree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-586211/55.
                               WPI; 2000-586211/55.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cowsert LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US6107092-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-AUG-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA92641;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA92641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
```

```
30-SEP-1998
01-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-OCT-1
              0
                               00
receptor RNA activator (SRA) nucleic acid sequences. Two series of antisense oligonucleotides were synthesised. The first series comprised 8 = 30 oligodeoxynucleotides with a phosphorothioate backbone. The second series comprised chimeric oligonucleotides composed of a central gap region, consisting of ten 2 deoxynucleotides, which was flanked on both sides by four-nucleotide wings. The wings were composed of 2 methoxyethyl (2 - MOE) nucleotides. Both series contained the same nucleotide sequences. The antisense compounds are useful for research, diagnosis, treatment and prophylaxis to prevent or delay infection, inflammation or tumour formation. Therapeutically the oligonucleotides are highly safe and are effectively administered to humans
                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; PRO polypeptide; membrane bound protein; receptor; diagnosis; transmembrane; secretion; immunoadhesion; pharmaceutical; screening;
                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                    Query Match
4.2%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                   Sequence 18 BP; 6 A; 6 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human PRO1480 reverse PCR primer SEQ ID NO:256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer; hybridisation; probe; ss.
                                                                                                                                                                                                                                                                                                                               842 TCTGAAGACAGCGTCCT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0098716P.
98US-009873P.
98US-009881P.
98US-009881P.
98US-009881P.
98US-009953E.
98US-009953E.
98US-0099541P.
98US-0099642P.
98US-0099642P.
98US-0099642P.
98US-0099612F.
98US-0099812P.
98US-0099812P.
98US-0099812P.
98US-0099812P.
98US-010038EP.
98US-010038EP.
98US-010038EP.
98US-010038EP.
98US-010038EP.
98US-010038EP.
                                                                                                                                                                                                                                                                                                                                                              rcreaaakcagacreer 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA37259 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US020111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-AUG-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200012708-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-SEP-1998
09-SEP-1998
09-SEP-1998
09-SEP-1998
10-SEP-1998
10-SEP-1998
10-SEP-1998
10-SEP-1998
10-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-SEP-1998;
15-SEP-1998;
15-SEP-1998;
15-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA37259;
                                                                                                                                                                                                                                                                                                                                                              П
                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 557
                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA37259
AAA37259
XX
AC
AAA3
XX
DT
OB
AAA3
XX
CAAA3
CAAA3
XX
CAAA3
CAAA3
XX
CAAA3
CAAA3
XX
CAAA3
CAAA3
CAAA3
XX
CAAA3
CA
       $$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                            qq
```

```
PR 17-SEP-1998 9 BGUS-0100664P.
PR 17-SEP-1998 1980S-01007110P.
PR 17-SEP-1998 1980S-01001919P.
PR 18-SEP-1998 1980S-01001919P.
PR 18-SEP-1998 1980S-0100149P.
PR 22-SEP-1998 1980S-0101044P.
PR 23-SEP-1998 1980S-0101044P.
PR 23-SEP-1998 1980S-0101044P.
PR 23-SEP-1998 1980S-0101474P.
PR 23-SEP-1998 1980S-0101449P.
PR 23-SEP-1998 1980S-0101332BP.
PR 23-SEP-1998 1980S-010246P.
PR 23-SEP-1998 1980S-010332BP.
PR 23-CCT-1998 1980S-01056694P.
PR 23-CCT-1998 1980S-01056694P.
PR 23-CCT-1998 1980S-01056694P.
PR 23-CCT-1998 1980S-0105639BP.
PR 23-CCT-1998 1980S-0106032P.
PR 23-CCT-1998
```

```
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 559
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAS02452,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                                                                                                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                     AAA37022 to AAA37144 encode the new isolated human transmembrane, receptor or secreted PRO polypeptides given in AAY99340 to AAX99462. The transmembrane and receptor PRO proteins can be used for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interactions. The polypeptides and nucleotide sequences harmaceutical and diagnostic agents. AAA37145 to AAA37330 represent PCR primers and hybridisation probes used in the isolation of the PRO polypeptides from the present invention
                                                                                                                                                                                                                                                    New mammalian DNA sequences encoding transmembrane, receptor or secreted PRO polypeptides, useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interactions.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                  Watanabe CK, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                                                                                                                                                                                                                                                         / маtch
Local Similarity 82.4%; Pred. No. 5.98+02;
les 14; Conservative 0; Mismatches 2. т-л-л-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Primer #76 used in the identification of proteins.
                                                                                                                                                                                                                                                                                                                                                                                               Sequence 18 BP; 3 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                  Smith V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Secreted; transmembrane; gene therapy; ss
                                                                                                                                                                                                                                                                                          Example 74; Page 436; 773pp; English.
                                                                                                                                                                                                                    Gurney AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      854 GICCIGGCICCAGIIGG 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
        9805-0106934P-
9805-0106934P-
9805-0108775P-
9805-0108779P-
9805-0108787P-
9805-0108787P-
9805-0108787P-
9805-0108801P-
9805-0108801P-
9805-0108801P-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gracaggergeagrieg 17
                                                                                                98US-0108867P.
98US-0108957P.
98US-0108925P.
98US-0108848P.
                                                                                                                                    98US-0108849P.
98US-0108850P.
                                                                                                                                                              98US-0108852P.
98US-0108858P.
                                                                                                                                                      98US-0108851P.
                                                                                                                                                                                98US-0108904P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF54384 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                  (GETH ) GENENTECH INC.
                                                                                                                                                                                                                  Goddard A,
                                                                                                                                                                                                                                    WPI; 2000-237871/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200078961-A1
                           10-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
                                                                                                           17-NOV-1998;
17-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     02-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-DEC-2000
                                                                       17-NOV-1998;
17-NOV-1998;
                                                                                         17-NOV-1998;
17-NOV-1998;
                                                                                                                                     18-NOV-1998,
                                                                                                                                              18-NOV-1998
                                                                                                                                                                                18-NOV-1998
                    3-NOV-1998
                                                                                                                                                       18-NOV-1998
                                                                                                                                                               18-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF54384;
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                    Baker K,
                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAF54384
   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Op
```

```
The present invention relates to secreted and transmembrane proteins. These proteins and the DNA encoding them may be used as hybridization probes, in chromosome and gene mapping and in the generation of antisense RNA and DNA. They may also be used used to generate either transgenic animals or knockout animals which are in turn useful for development and screening of therapeutically useful reagents. The nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Secreted and transmembrane proteins and nucleic acids designated PRO, useful as hybridization probes, in chromosome and gene mapping and gene
                                                                                                                                                                                                                                                                                                                                                                                                   Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S; Gao W, Goddard A, Godowski PJ, Grimaldi CJ, Gurney AL, Hillan KJ; Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; Thrombospondin repeat domain; TSRX; cancer; breast cancer; rheumatoid arthritis; ocular neovascularisation; wound healing; angiogenesis; immune associated disorder; gestational disorder; pre-eclampsia; neuronal development; immunogen; antibody; antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 12.2; DB 1; Length 18; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            agonist; TSR1; sequencing primer; 17897469 Š9; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 3 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human TSR1, sequencing primer 17897469 S9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acids may also be used in gene therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 74; Page 450; 787pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS02452 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
                                               99US-0141037P.
99US-0144758P.
99US-0145698P.
99WO-US020111.
99US-0162506P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-SEP-1999; 99US-0156217P.
27-JUN-2000; 2000US-0214759P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 27-SEP-2000; 2000WO-US026432
                                                                                                                                                                                   99WO-US028313.
                                                                                                                                                                                                                                      99WO-US030095.
2000WO-US000219.
2000WO-US000376.
18-FEB-2000; 2000WO-US004342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 854 GTCCTGGCTCCAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 GracaGGCrGCAGTrGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 82.4 nes 14; Conservative
                                                                                                                                                                                                                                                                                                                                                   (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-071395/08.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200123561-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                           20-JUL-1999;
26-JUL-1999;
01-SEP-1999;
29-OCT-1999;
30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Williams PM,
                                                                                                                                                                                                                                                                                              06-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-JUL-2001
                                                                                                                                                                                                                                        16-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAS02452;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       therapy.
```

0

26-SEP-2000; 2000US-00669360.

26-SEP-2000; 2000US-00669360.

```
(CURA-) CURAGEN CORP
               WPI; 2001-266157/27.
                                                                                             Query Match
Best Local Similarity
Matches 14; Conserva
                                                                                                                                                               WO200123561-A2
          Shimkets RA,
                                                                                                                                 18-JUL-2001
                                                                                                                                                          Homo sapiens
                                                                                                                                                                    05-APR-2001.
                                                                                                                             AAS02453;
                                                                                                                   RESULT 560
                                                                                                                     g
```

The sequence represents a sequencing primer used to sequence the cDNA clone encoding the Human thrombospondin-1 repeat (TSR) domain containing protein, TSRI, Members of the TSR superfamily, TSRX proteins, include proteins responsible for call attachment, spreading, motility, chroskeletal organisation, wound healing and angiogenesis. TSRX, TSRX polyucolectides and anti-TSRX antibodies are useful for diagnosing, treating or preventing cancer, theumatoid arthritis, ocular neovascularisation, wound healing, immune associated disorders and gestational diseases (e.g. pre-eclampsia). TSRX and TSRX polyucolectides can be used to identify members of the TSR superfamily, to screen for molecules which inhibit or enhance TSRX activity or function, as targets for identification of small molecules that modulate or inhibit e.g. or angiogenesis or neuronal development. Also TSRX antisense molecules or other agonists are useful for detecting and treating breast cancer. TSRX proteins can be used to screen drugs or compounds that modulate TSRX cativity or expression as well as to treat disorders characterised by the true decreases the production of TSRX forms the true decreases the production of TSRX forms the true decreases. ö that have decreased or aberrant activity compared to TSRX wild-type. Anti-TSRX antibodies can be used to isolate TSRXs and modulate TSRX activity. Portions or fragments of TSRX cDNAs are used as polynucleotide reagents and are used for tissue typing and forensic identification TSRX PRO (PRO comprising thrombospondin-I repeat) domain useful to identify molecules modulating TSRX activity or function, for treating cancer, rheumatoid arthritis and ocular neovascularization. Gaps Herrmann JL; .. 0 4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; tive 0; Mismatches 3; Indels Boldog FL, Sequence 18 BP; 2 A; 7 C; 5 G; 4 T; 0 U; 0 Other; Tchernev VT, Example 2; Page 90; 116pp; English. 14; Conservative ပဲ Vernet

705 CAGCGAGTCCCAGGAGA 721 ~ 18 cagcgagrcacggcga

ö

Gaps

..

4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; Live 0; Mismatches 3; Indels

Query Match
Best Local Similarity 82.4
Matches 14; Conservative

721 17

ਨੋ Op

1 CAGCGAGTCACGGGCGA 705 CAGCGAGTCCCAGGAGA

BP.

AAF94722 standard; DNA; 18

RESULT 561 AAF94722

rheumatoid arthritis; ocular neovascularisation; wound healing; anglogenesis; immune associated disorder; gestational disorder; pre-eclampsia; neuronal development; immunogen; antibody; antisense; agonist; TSR1; sequencing primer; 17897469 S10; ss. Human; Thrombospondin repeat domain; TSRX; cancer; breast cancer; Human TSR1, sequencing primer 17897469 S10. AAS02453 standard; DNA; 18 BP. (first entry)

27-SEP-2000; 2000WO-US026432 27-SEP-1999; 99US-0156217P. 27-JUN-2000; 2000US-0214759P.

```
The sequence represents a sequencing primer used to sequence the cDNA clone encoding the Human thrombospondin-1 repeat (TSR) domain containing protein, TSR1 Members of the TSR superfamily, TSRX proteins, include proteins responsible for cell attachment, spreading, motility, cryoskeletal organisation, wound healing and angiogenesis. TSRX, TSRX polymcleotides and anti-TSRX antibodies are useful for diagnosing, treating or preventing cancer, rheumatoid arthritis, ocular neovascularisation, wound healing, immune associated disorders and gestational diseases (e.g. pre-eclampsia). TSRX and TSRX polymcleotides can be used to identify members of the TSR superfamily, to screen for molecules which inhibit or enhance TSRX activity or function, as targets for identification of small molecules that modulate or inhibit e.g. angiogenesis or neuronal development. Also TSRX antisense molecules or cother agonists are useful for detecting and treating breast cancer. TSRX proteins can be used to acreen drugs or compounds that modulate TSRX activity or expression as well as to treat disorders characterised by insufficient or expressive production of TSRX forms that have accounted that have not been accounted that modulate TSRX activity or expressive production of TSRX or production of TSRX forms that have accounted that have not accounted that have not production of TSRX forms that have accounted that have not accounted that have not production of TSRX forms that have accounted that modulate TSRX forms that have accounted that have not accounted that have not production of TSRX forms that have accounted that have not been accounted to accounted that have not production of TSRX forms that have accounted that have not accounted that have not production of TSRX forms that have accounted that have not accounted that have not production of TSRX forms that have the process of the production of TSRX forms and the process of the process of the production of TSRX forms and the process of the process of the process of the process of the proc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            that have decreased or aberrant activity compared to TSRX wild-type. Anti-TSRX antibodies can be used to isolate TSRXs and modulate TSRX activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Portions or fragments of TSRX cDNAs are used as polynucleotide reagents and are used for tissue typing and forensic identification
                                                                                                                                                                                                                                                                                                 TSRX PRO (PRO comprising thrombospondin-I repeat) domain useful to identify molecules modulating TSRX activity or function, for treating cancer, rheumatoid arthritis and ocular neovascularization.
                                                                                                                                                                    Herrmann JL;
                                                                                                                                                        Tchernev VT, Boldog FL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 4 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 2; Page 90; 116pp; English.
                                                                                                                                                        Vernet C,
                                                                          (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                               WPI; 2001-266157/27.
                                                                                                                                                    Shimkets RA,
```

Rho; GTP binding protein; phosphorothioate antisense oligonucleotide; RhoA; RhoB; RhoC; RhoG; Rac 1; cdc42; hyperproliferative condition; cancer; wound healing; clotting; ischaemia; reperfusion; reoxygenation; Rho C antisense phosphorothioate oligonucleotide SEQ ID 146. 18-AUG-2000; 2000WO-US022808, (first entry) WO200115739-A1. Homo sapiens. 23-MAY-2001 31-AUG-1999; 08-MAR-2001. AAF94722; 

99US-00387341.

(ISIS-) ISIS PHARM INC

```
Roberts ML,
```

```
This invention relates to an antisense compound targeted to a nucleic acid molecule encoding a member of the human Rho family of small GTP binding proteins, where the antisense compound inhibits the expression of the member of the human Rho family. The invention includes antisense oligonucleotides AAP94580 - AAP94637 which target a RhoA nucleotide sequence, AAP94645 - AAP94684 which target a RhoC nucleotide sequence, AAP94727 - AAP94765 which target a RhoC nucleotide sequence, AAP94777 - AAP94766 which target RhoG nucleotide sequence, AAF94790 which target a Rac 1 nucleotide sequence and AAP94795 - AAP94790 which target a Rac 1 nucleotide sequence and AAP94795 - AAP94790 which target carget in conclotide sequence and AAP94795 - AAP94809 which target carget a Rac 1 nucleotide sequence and AAP94795 - AAP94809 which target carget in conclotide sequence and AAP94795 - AAP94809 which target carget in an including conditions and ischaemia/reperfusion or reoxygenation injury. The compound may also be used to diagnose the above conditions
                                                                                                                   An antisense compound targeted to a nucleic acid molecule encoding a member of the human Rho family of small GTP binding proteins useful for
                                                                                                                                                                                                                                                                                                                                                                                      Example 16; Page 73; 156pp; English
                                                                                                                                                                                                                                                           treating e.g. cancer and ischemia.
WPI; 2001-191677/19
```

```
Gaps
                                                     .
0
                        Length 18;
                                                     3; Indels
Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                        / Match 4.2%; Score 12.2; DB 1;
Local Similarity 82.4%; Pred. No. 5.9e+02;
                                                       Mismatches
                                                       0
                                                                                    883
                                                                                                           cacririccigradacca 17
                                                                                    CACTITCCIGAGAIGCA
                                                        14; Conservative
                                                                                    873
                             Query Match
                                                        Matches
                                                                                    δ
                                                                                                            셤
```

.. 0

```
AAL49055 standard; DNA; 18
           (first entry)
           29-OCT-2002
        AAL49055;
RESULT 562
  AAL4905
```

BP.

Nucleic acid analysis, microarray, single nucleotide polymorphism; SNP; multiplex; expression analysis; hybridisation tag; ss. Drosophila ubx gene SNP analysis universal hybridisation tag #29. WO200261121-A2 Drosophila sp.

29-JAN-2001; 2001US-0264972P. 02-FEB-2001; 2001US-0266186P. 04-JUN-2001; 2001US-0295986P. 28-JAN-2002; 2002WO-EP000868.

08-AUG-2002

SYGN ) SYNGENTA PARTICIPATIONS AG

Hinkel CA, Kimmerly WJ, Yang L;

WPI; 2002-636566/68.

Determining polynuclectide expression, useful for expressing profiling or detecting single nuclectide polymorphisms, comprises hybridizing digested cDNA to a capture probe coupled to a solid particle under stringent

Claim 34; Page 29; 63pp; English.

ó The present invention relates to a method of determining polynucleotide expression, which comprises hybridising digested cDNA to a capture probe coupled to a solid particle under stringent conditions, where the capture probe is specific for the target polynucleotide and the particle dentifies the capture probe. The method is useful for expression profiling, where the presence and/or the amount of a target polynucleotide is simultaneously determined, for diagnosing a disease, condition, disorder, or predisposition associated with a change in expression patterns, in determining the developmental or physiological stree of a cell or tissue, for detecting SNPs, which may be used to state of a cell or tissue, for detecting SNPs, which may be used to disorder, and in marker assisted selection. The present sequence is a Gaps Mycobacterium differentiation; Mycobacterium detection; us-p34; Mycobacterium species-specific; upstream p34 gene region; biochip; macro-array; Mycobacterium avium-complex; MAC-complex; TUB; MOTT; Mycobacterium tuberculosis-complex; mycobacterial species; probe; non-tuberculous mycobacteria; NTM; Pseudomonas detection; ss. hybridisation tag described in the exemplification of the invention ·. Score 12.2; DB 1; Length 18; Pred. No. 5.9e+02; 0; Mismatches 3; Indels Sequence 18 BP; 1 A; 4 C; 5 G; 8 T; 0 U; 0 Other; Pseudomonas species control probe #1. (UYLO-) UNIV CATHOLIQUE LOUVAIN 0; 837 1 TTCGCTGTGGCTCTGTT 17 BP 19-FEB-2001; 2001EP-00870030. 21-FEB-2001; 2001US-0269848P. 23-MAY-2001; 2001US-0292509P. 15-FEB-2002; 2002EP-00447026 4.2%; 821 TIGGCIGIGICICITI ABS70100 standard; DNA; 18 (first entry) Local Similarity 82.4 nes 14; Conservative Pseudomonas sp. EP1233076-A2. 22-NOV-2002 21-AUG-2002 ABS70100; Query Match Matches RESULT 563 ABS70100/c Xð g

The present invention relates to methods for differentiating and detecting between Mycobacterium strains in a sample based on speciesspecific upstream p34 gene region (us-p34) sequences. Also provided are new us-p34 sequences, primers and probes. The invention also relates to methods for detecting and differentiating between Pseudomonas strains. A Mycobacterium species-specific us-p34 nucleotide probe or primer is useful for producing a biochip or a micro-array for detecting M. avium-Detecting/differentially detecting Mycobacterium strain in sample, by reacting non-tuberculosis Mycobacterium species-specific upstream p34 gene region probe with sample and detecting duplexes having the probe. Example 2; Page 29; 92pp; English. WPI; 2002-637887/69.

Gala J, Vannuffel P;

monoclonal antibodies or

```
..
0
       mycobacteria other than M. tuberculosis-complex (TUB) (MOTT)
Mycobacterium in a sample. A Mycobacterium us-p34 nucleotide primer is
useful for detecting new us-p34 sequences in a sample. The method of the
invention identifies in a single assay, a wide range of mycobacterial
species that include members of the TUB and non-tuberculous mycobacterial
(NTM). The present sequence represents a control probe used in the
(MAC-complex) Mycobacterium species in a sample, and detecting
                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                      Depurination; depyrimidination; endonuclease; N-glycosidase; lectin;
                                                                                                                                   .,
                                                                                                           4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; Live 0; Mismatches 3; Indels
                                                                                       Sequence 18 BP; 5 A; 1 C; 10 G; 2 T; 0 U; 0 Other;
                                                                    examples of the present invention
                                                                                                                                                    935
                                                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                   cytotoxic agent; cytokine; ss
                                                                                                                                                                                                                                                                                                                                                                                               14-MAR-2002; 2002EP-00005362.
                                                                                                                                                   TCATCACCACCACCTC
                                                                                                                                                                        TCATCCCCACCTTCCTC
                                                                                                                                                                                                                       ABV74444 standard; RNA; 18
                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                   RNA oligonucleotide E16S.
                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                       EP1241267-A2
                                                                                                                                                                                                                                                                22-JAN-2003
                                                                                                                               14;
                                                                                                                                                                                                                                                                                                                                                                            18-SEP-2002.
                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                            ABV74444;
                                                                                                                                                   919
                                                                                                                                                                      17
                                                                                                                               Matches
                                                                                                                                                                                                             d
                                                                                                                                                   à
```

that causes sequence specific depurination or depyrimidination of a muleic acid (NA) without strand breakage or has sequence-specific endomuclease activity. The test sample is contacted with a substrate (II) that contains 3 NA segments. A and that are complementary and hybridise that contains 3 NA segments. A and that complementary and hybridise that contains 3 NA segments. A conditions, forming a hairpin structure and an intermediate segment B, containing a recognition motif for the activity being determined. (II) also includes a fluorophore/quencher (F/O) pair segments are hybridised, F and Q are sufficiently close to each other for segments are hybridised. F and Q are sufficiently the sample is also contacted with an agent (III) that cuts B specifically at the site where loss of a base has occurred. Any light emitted from F is then detected specifically. The method is especially used to determine activity of specifically mistletce lectin) and restriction enzymes, particularly to detect loss of activity during storage but also to dentify new, potentially therapeutic, enzymes. Some (I) are known as Detecting activity of enzymes that alter or cut nucleic acid, useful particularly for cytotoxic ribosome-inactivating proteins, from cleavage of fluorescent substrate. The invention relates to detecting an enzymatically active substance (I) Example 1; Page 13; 32pp; German.

17

1 raacrtreerereed

RESULT 566

```
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a method of producing a recombinant polypeptide of interest, which comprises using a cost effective medium that does not contain serum or any functional (and/or recombinant) full-length protein. The medium comprises water, plant-derived peptone, osmolality regulator, buffer, energy source, amino acids, lipid source or precursor, source of iron, non-ferrous metal ions and one or more vitamins and cofactors. An example of a protein of interest is human erythropoietin (EPO). The method is useful for producing recombinant by proteins of interest. The present sequence is an oligonucleotide used in
                  of an oligonucleotide used to
                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                Human; erythropoietin; cell culture process; vector; PCR; primer; ss;
EPO; recombinant protein production.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Producing a recombinant polypeptide of interest comprises providing a transformed eukaryotic host cell and a serum-free culture medium and culturing the transformed eukaryotic host cell in the culture medium.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                          .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                        4.2%; Score 12.2; DB 1; Length 18; 32.4%; Pred. No. 5.9e+02; Ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
E4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unterluggauer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                           Sequence 18 BP; 6 A; 1 C; 5 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 3 A; 2 C; 6 G; 7 T; 0 U; 0 Other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 12.2; DB 1;
Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mueller D,
 cytotoxic agents, e.g. where coupled to cytokines. The present sequence is that exemplify examples of the invention
                                                                                                                                                                                                                                                                                                                                                  Human erythropoietin gene PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 27; 54pp; English.
                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                    834 TITICITCICIGAAGAC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kunert R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-NOV-2002; 2002WO-EP013298.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-NOV-2001; 2001US-0333867P.
                                                                                                       82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          82.48;
                                                                                                                                                                                rrcrcarcrcraaaac
                                                                                                                                                                                                                                                          ACC59640 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        973 TAAATCTGGTGTATGGG
                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BIOC ) BIOCHEMIE GMBH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-493398/46.
                                                                                     Query Match
Best Local Similarity
Matches 14; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bogner F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003045995-A2
                                                                                                                                                                                                                                                                                                                      08-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-JUN-2003
                                                                                                                                                                                                                                                                                        ACC59640;
                                                                                                                                                                                17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zeng S,
                                                                                                                                                                                                                            RESULT 565
                                                                                                                                                                                                                                                                                                                                                                                                                            Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                             ACC59640
888666
                                                                                                                                                                                                                                                          g
                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
```

14-MAR-2001; 2001EP-00106265

(VISC-) VISCUM AG.

ŝ

Wojczewski

Ayguen H,

WPI; 2002-734617/80.

Pelet C;

05-JUN-2003

08-SEP-2003

Human

ACC59677;

ACC59677

```
The present invention describes a method for detecting and differentiating between haematopoietic cell proliferative disorders associated with at least 1 gene and/or their regulatory regions in a subject. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least 1 reagent, which distinguishes between methylated and non-methylated CpG dinnucleotides within the target nucleic acid. AB209861 to AB211118 represent specifically claimed nucleotide sequences from the present invention. Oligonucleotides from the present invention can be used: for differentiating between healthy haematopoietic cells and proliferative disorder haematopoietic cells; for differentiating between acute myelogenous leukaemia, as probes for determining the cyrosine methylation state and/or single nucleotide polymorphisms (SNPs) of haematopoietic cell proliferation disorder related sequences and their complements; and as primers for the sequences. The nucleotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between complements, proliferation and/or molicotide sequences from the present invention can also be used for detecting a predisposition to, differentiation between complements, propoietic cell proliferative disorders. The present method enables a highly specific classification of haematopoietic cell proliferative cell proliferative chighly specific classification of haematopoietic cell proliferative disorders. The present method enables con highly specific classification of haematopoietic cell proliferative cell proliferative cell proliferative disorders. The present method enables con highly specific classification of haematopoietic cell proliferative disorders. The present method enables con highly specific classification of haematopoietic cell proliferative disorders. The present method enables con the contraction of particular cell proliferative disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                          Detecting and differentiating between hematopoietic cell proliferative disorders, comprises contacting a target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Recombinant protein production, vector, host cell line, erythropoietin, EPO; human, selection agent, selectable marker, PCR; primer, ss.
                                                                                                                                                                                                                     Berlin K, Braun A, Distler J, Guetig D, Howe A, Mueller J, Olek A, Piepenbrock C, Adorjan P, Grabs G, Lesche R, Leu E; Lewin A, Lipscher E, Maier S, Model F, Mueller V, Otto T, Eschwope I, Ziebarth H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18 BP; 1 A; 1 C; 10 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human erythropoietin gene PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 15; Page 69; 117pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                   26-MAR-2001; 2001US-0278333P.
                                                                               26-MAR-2002; 2002WO-EP003401.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    921 ATCACCACCACCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18 ACCACCACCGCCCTCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC59779 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-SEP-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 82.1.
Local Similarity 82.1.
                                                                                                                                                                                         (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-018942/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003046187-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                         03-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC59779;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC59779
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Haematopoietic cell proliferation disorder related oligonucleotide #1047.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Recovering and purifying recombinant human erythropoietin (rhEpo) from a cell culture medium comprising host cells by the removing host cells, cellular constituents or debris and subjecting one or more fractions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention relates to a method of recovering and purifying recombinant human erythropoietin (rhEpo) from a cell culture medium having host cells comprising removing host cells, cellular constituents and debris from the cell culture medium by performing a procedure comprising centrifugation followed by a depth filtration step and centrifugation. The method is useful for recovering and purifying rhEpo from a cell culture medium. The present sequence is an oligonucleotide shown in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                               Human, erythropoietin, recombinant protein production, vector; BPO; host cell line; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; haematopoietic cell proliferation disorder; cytostatic; gene therapy; lymphocytic leukaemia; acute myelogenous leukaemia; cytosine methylation state; probe; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 3 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                    erythropoietin gene PCR primer #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 26; 58pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   973 TAAATCTGGTGTATGGG 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                  ACC59677 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-NOV-2001; 2001US-0333839P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-NOV-2002; 2002WO-EP013299.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 TAACTTTGGTGTCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABZ10907 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (BIOC ) BIOCHEMIE GMBH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alliger P, Palma N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-505187/47.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             which contain rhEpo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                              WO2003045996-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200277272-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-JAN-2003
```

ö

Gaps

..

Indels

Synthetic.

ABZ10907;

RESULT 567

g

à

ABZ10907,

Query Match

Matches

ಥ

```
01-0CT-19
02-0CT-19
06-0CT-19
06-0CT-19
                                                                                                                                                                                                                                                                                                                                                                                                             22-SEP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                             23-SEP-1
                                                                                                    -SEP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-SEP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-SEP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-SEP-1
                                                                                                                                                                                                                                                                                                                                                                                                  18-SEP-
                                                                                                                                                                                                                                                                                                                                            17-SEP-
                                                                                                                                                                                             15-SEP-
                                                                                                                                                                                                                                                                                                                                                                18-SEP-
   ö
                                                                                                                                                                                                             The present invention relates to a method of producing a transformed eukaryotic host cell that expresses a recombinant polypeptide of interest comprising introducing into a enkaryotic host cell first and second polymucleotide vectors that are integrated into the genome of the host cell. Particular polypeptides of interest include human erythropoietin recombinant polypeptides of interest include human erythropoietin recombinant polypeptides, such as human erythropoietin, and in producing the polypeptides. The present sequence is an oligonucleotide used in the exemplification of the invention
                                                                                                                                      ovary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; secreted and transmembrane protein; PRO; angiogenesis; endothelial cell proliferation; wound healing; immune response; T-lymphocytes proliferation; neonatal heart hypertrophy; tumour; cardiac insufficiency disorder; calcium flux; inflammarion; vascular endothelial growth factor-stimulated proliferation; mammalian kidney mesangial cell proliferation; Berger disease; mephropathy; Schanlein-Henoch purpura; celiac disease; Crohn's disease; dermatitis herpetiformis; diabetes; haemoglobin switch; insulinaemia; pancreatic beta-cell precursor cell differentiation; thalassemias; obesity; auditory hair cell regeneration; hearing loss; bone disorder; cartilage disorder; sports injury; arthritis; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                  Producing a transformed eukaryotic host cell (e.g. Chinese hamster o cell) that expresses a recombinant polypeptide (e.g. erythropoietin) comprises introducing into the host cell a first and a second
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Novel human secreted and transmembrane protein related primer #75.
                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                       Unterluggauer F;
                                                                                                                                                                                                                                                                                                                                                   4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                             Sequence 18 BP; 3 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                       Schoergendorfer K, Windisch J, Kunert R,
                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                          Example 1; Page 31; 62pp; English
                                                                                                                                                                                                                                                                                                                                                                                              973 TAAATCTGGTGTATGGG 989
                                                                                                                                                                                                                                                                                                                                                                                                                1 TAACTTTGGTGTCTGGG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0098716P.
98US-0098723P.
98US-0098749P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACD68423 standard; DNA; 18 BP
                      26-NOV-2002; 2002WO-EP013297
                                            28-NOV-2001; 2001US-0333868P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-DEC-2001; 2001US-00015869.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                         14; Conservative
                                                                 (BIOC ) BIOCHEMIE GMBH.
                                                                                                                                                                    polynucleotide vector
                                                                                                             WPI; 2003-505205/47.
                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US2003073130-Al.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
05-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACD68423;
                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                Op
```

```
98US-0098812P
98US-0098812P
98US-0099536P
98US-0099598P
98US-0099602P
98US-0099741P
98US-0099744P
98US-0099764P
98US-0099764P
98US-0099764P
98US-0099764P
98US-0099764P
98US-0099764P
98US-0099812P
98US-0100388P
98US-0100388P
98US-0100388P
                                                                                                                                                                                                                                                                                              9805-0100711P
9805-0100919P
9805-0100848P
9805-0100849P
9805-010168P
9805-010168P
9805-010168P
9805-010171P
9805-0101471P
9805-0101474P
9805-0101476P
9805-01014776P
9805-01014776P
9805-01014776P
9805-01014776P
9805-01014776P
9805-01014776P
9805-01014776P
9805-01014776P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0102307P
98US-0102330P
98US-0102484P
98US-0102487P
98US-0102570P
98US-0102684P
98US-0102684P
98US-0102684P
                                                                                                                                                                                                                                        98US-0100661P.
98US-0100662P.
98US-0100664P.
98US-0100683P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0103449P.
98US-0103314P.
98US-0103315P.
                                                                                                                                                                                                                                                                                      98US-0100684P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0103328P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0103396P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0103633P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0103679P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0103711P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
29-SEP-1998;
29-SEP-1998;
                                                                                                                                     10-SEP-1998;
10-SEP-1998;
                                                                                                      1998;
                                                                                                                10-SEP-1998;
                                                                                                                                                            LO-SEP-1998;
                                                                                                                                                                                            15-SEP-1998;
                                                                                                                                                                                                         15-SEP-1998;
                                                                                                                                                                                                                                L6-SEP-1998;
                                                                                                                           10-SEP-1998
                                                                                                                                                                        10-SEP-1998
                                                                                                                                                                                                                   16-SEP-1998
                                                                                                                                                                                                                                                                           7-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                    18-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-SEP-1998;
                                                                                                                                                                                                                                                                                                            17-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-0CT-1998
07-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-0CT-1998
07-0CT-1998
```

```
24-FEB-2000; 2000WO-US005004.
02-MAR-2000; 2000WO-US005841.
15-MAY-2000; 2000WO-US006884.
17-MAY-2000; 2000WO-US013705.
22-MAY-2000; 2000WO-US014042.
30-MAY-2000; 2000WO-US014941.
                                                                                                                                                              98US-0106178P
98US-0106178P
98US-0106248P
98US-010645P
98US-010695P
98US-0106902P
98US-0106903P
98US-0106934P
98US-0106934P
98US-0108775P
98US-0108775P
98US-0108775P
98US-0108778P
98US-010878P
98US-010878P
98US-010887P
98US-0108848P
98US-0108867P
98US-0108867P
98US-0108868P
98US-0108868P
98US-0108868P
98US-0108868P
98US-0108868P
98US-0108868P
98US-0108868P
98US-0108868P
98US-0108885P
98US-010885P
98US-010885P
98US-010885P
                                                                                            9805-0105882P.
9805-0106052P.
9805-0106023P.
9805-0106030P.
9805-0106032P.
                           98US-0105104P.
98US-0105169P.
98US-010566P.
98US-0105693P.
98US-0105894P.
98US-0105881P.
98US-0104987P.
98US-0105000P.
98US-0105002P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US000106.
99US-0129674P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99US-0141037P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0144758P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US020111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99US-0162506P.
99WO-US028313.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US028551.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99WO-US030095.
2000WO-US000219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000WO-US000376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US003565.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US004342.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US023328
2000WO-US030952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-DEC-1999;
16-DEC-1999;
05-JAN-2000; 2
06-JAN-2000; 2
11-FEB-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-AUG-2000;
24-AUG-2000;
08-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-JUL-1999;
01-SEP-1999;
15-SEP-1999;
29-OCT-1999;
30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                       17 - NOV - 1998
18 - NOV - 1998
20-0CT-1998;
20-0CT-1998;
21-0CT-1998;
22-0CT-1998;
22-0CT-1998;
22-0CT-1998;
24-0CT-1998;
27-0CT-1998;
27-0CT-1998;
27-0CT-1998;
28-0CT-1998;
28-0CT-1998;
28-0CT-1998;
28-0CT-1998;
28-0CT-1998;
28-0CT-1998;
29-0CT-1998;
29-0CT-1998;
30-0CT-1998;
                                                                                                                                                                                                                                                                                                   17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                               22-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-JAN-1999;
16-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-JUN-1999
                                                                                                                                                                                                                                                                        10-NOV-1998;
                                                                                                                                                                                                                                                                                           17-NOV-1998;
```

```
Hillan KJ;
Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Producing polypeptide of interest by culturing hybridoma or transformed host cell which comprise a nucleotide sequence encoding polypeptide, in culture medium free from each of a plant-derived or animal-derived peptone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel isolated PRO polypeptides e.g. PRO1130, PRO1275, PRO1418, PRO1555, PRO1787 that modulate glucose or free fatty acid uptake by skeletal muscle cells, and are useful for treating diabetes, hyper- or hypo-insulinemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                          Fong S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Recombinant protein production, mammalian cell culture, human, erythropoietin, EPO, PCR, primer, ss.
                                                                                                                                                                                                                                                                                                                                                          Baker KP, Botstein D, Desnoyers L, Baton DL, Ferrara N, Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 4.2%; Score 12.2; DB 1; Length 1
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mueller D, Unterluggauer F;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (POLY-) POLYMUN SCI IMMUNOBIOLOGISCHE FORSCHUNG.
(KATI/) KATINGER H.
(KUNE/) KUNERT R.
(MUEL/) MUELLER D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human erythropoietin gene PCR primer #3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 40; 77pp; English.
10-NOV-2000; 2000WO-US030873.
28-FEB-2001; 2001WO-US032678.
28-FEB-2001; 2001WO-US006520.
01-MAR-2001; 2001WO-US017800.
01-JUN-2001; 2001WO-US019692.
20-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021735.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               854 GICCIGGCICCAGIIGG 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gracaggcracagride 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACC85118 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-NOV-2001; 2001US-0333867P. 28-NOV-2001; 2001US-0333868P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-NOV-2002; 2002WO-EP013431.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      UNTERLUGGAUER F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Katinger H, Kunert R,
                                                                                                                                                                                                                                                                                                              (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-513644/48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-585293/55.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003046162-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-JUN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC85118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (UNIE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 570
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC85118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RY THE FIRST STANFORM STANFORM
            ð
```

0;

Page 281

```
The present invention relates to a method of producing a polypeptide of interest, which involves culturing a hybridoma or transformed host cell a culture medium for mammalian cell culture, where the medium comprises water, buffer, energy Source, amino acids, lipid source, precursor, or iron source, non-ferrous metal ions, inorganic salts, vitamins and cofactors, and is free from each of a plant-derived or animal-derived peptone. An example protein which may be produced using the method is human erythropoiatin (EPD). The method is useful for producing a polypeptide of interest chosen from human growth hormone, human monoclonal antibodies, preferably of subclasses 1gd, 1gM and 1gA, and monoclonal human/mouse chimeric antibodies, where the transformed host cell comprises at least two polynucleotide vectors that encode different proteins of interest and where the different proteins are different proteins of interest and where the different proteins are different parts of an antibody, particularly the light and heavy chains of an antibody. The present sequence is an oligonucleotide used in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; ss; PCR; secreted protein; transmembrane protein; PRO; vulnerary; cardiant; antidiabetic; anorectic; antiarthritic; angiogenesis; cancer; adrenal cortical capillary; endothebial cell growth; wound healing; stimulated T-lymphocyte proliferation; immune response suppression; neonatal heart hypertrophy; cardiac insufficiency disorder; neonatal heart capent factor; inflammation; mononuclear cell; eosinophi; diabetes; obesity; or hyper-insulinaemia; hypo-insulinaemia; sports influry; arthritis; primer.
                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                      .
,
                                                                                                                                                                                                                                                                                                                                               4.2%; Score 12.2; DB 1; Length 18; 32.4%; Pred. No. 5.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human secreted/transmembrane protein PRO1480 PCR primer #3
                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 3 A; 2 C; 6 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                   973. TAAATCTGGTGTATGGG 989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0098743P
98US-0098743P
98US-0098803P
98US-0098811P
98US-0098813P
98US-0099596P
98US-009959B
98US-0099502P
98US-0099741P
98US-0099744P
98US-0099744P
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 raacrirgerereges 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-DEC-2001; 2001US-00006856
                                                                                                                                                                                                                                                                                                                                                             82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACH04525 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-OCT-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 82.45
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003044841-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACH04525;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACH04525
```

```
980S-0099808P-98US-0099812P-98US-0099812P-98US-0099812P-98US-010038P-98US-010039P-98US-010039P-98US-0100627P-98US-0100648P-98US-0100648P-98US-0100648P-98US-0100648P-98US-0100648P-98US-0100648P-98US-0100648P-98US-0100648P-98US-0101177P-98US-0101477P-98US-0101477P-98US-0101478P-98US-0101478P-98US-0101478P-98US-0101478P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-0101741P-98US-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         980S-0102431P.
980S-0102464P.
980S-0102570P.
980S-0102571P.
980S-0102687P.
980S-0102687P.
980S-0103449P.
980S-0103449P.
980S-0103449P.
980S-0103449P.
980S-0103449P.
980S-0103478P.
980S-0103478P.
980S-0103478P.
980S-0103678P.
980S-0103678P.
980S-0103678P.
980S-0103679P.
980S-0103679P.
980S-0103679P.
980S-0103679P.
980S-010500P.
980S-010500P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0105694P.
98US-0105807P.
98US-0105881P.
                                            10-SEP-1998;
15-SEP-1998;
15-SEP-1998;
15-SEP-1998;
16-SEP-1998;
16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                 23-SEP-1998;
23-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                  18-SEP-1998;
22-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                       SEP-1998;
                                                                                                                                                                                                                                                                                                                    18-SEP-1998
18-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                  23-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-SEP-1998;
30-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-OCT-1998;
                                                                                                                                                                                                                                                                                     18-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-SEP-1998
23-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-SEP-1998
24-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-SEP-1998
24-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-SEP-1998
29-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-SEP-1998
29-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-OCT-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-0CT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-0CT
```

98US-0106062P

```
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
22-DEC-1999;
33-0-DEC-1999;
05-JAN-1999;
28-OCT-1998;
28-OCT-1998;
28-OCT-1998;
28-OCT-1998;
28-OCT-1998;
29-OCT-1998;
29-OCT-1998;
30-OCT-1998;
30-OCT-1998;
30-OCT-1998;
30-OCT-1998;
30-OCT-1998;
30-OCT-1998;
31-NOV-1998;
                                                                                                                           17-NOV-1998;
17-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                            23-JUN-1999;
                                                                                                                                                                                        16-APR-1999;
 \chi_{XXX}
```

GETH ) GENENTECH INC.

26-JUL-1999; 99US-014569BP.
01-SEP-1999; 99W0-US020111115-SEP-1999; 99W0-US020111129-OCT-1999; 99W0-US02111130-NOV-1999; 99W0-US028313.
16-DEC-1999; 99W0-US028313.
16-DEC-1999; 99W0-US028313.
16-DEC-1999; 99W0-US028313.
16-DEC-1999; 99W0-US028313.
16-DEC-1999; 99W0-US028313.
11-FEB-2000; 2000W0-US000356.
11-FEB-2000; 2000W0-US000376.
11-FEB-2000; 2000W0-US000376.
11-FEB-2000; 2000W0-US006841.
15-MAR-2000; 2000W0-US006841.
15-MAR-2000; 2000W0-US006841.
15-MAR-2000; 2000W0-US014941.
22-MAY-2000; 2000W0-US014941.
23-AUG-2000; 2000W0-US0132328.
24-AUG-2000; 2000W0-US013328.
26-MUS-2000; 2000W0-US013678.
21-DNV-2000; 2000W0-US013678.
21-DNV-2000; 2000W0-US013678.
21-DNV-2000; 2000W0-US013678.
21-DNV-2000; 2000W0-US013678.
21-DNV-2001; 2001W0-US013699.
20-JUN-2001; 2001W0-US013699.
20-JUN-2001; 2001W0-US01368. 98US-0106023P. 98US-0106023P. 98US-0106032P. 98US-0106033P. 98US-0106038P. 98US-0106248P. 98US-0106348P. 98US-0106348P. 98US-010636P. 98US-010636P. 98US-010695P. 98US-010695P. 98US-010695P. 98US-010693P. 98US-010693P. 98US-010693P. 98US-010693P. 98US-010693P. 98US-010693P. 98US-010693P. 98US-010897P. 98US-010877P. 98US-010877P. 98US-0108867P. 98US-0108925P. 98US-0108848P. 98US-0108849P. 98US-0108850P. 98US-0108852P. 98US-0108858P. 98US-0108904P. 98US-0113296P. 98US-0114223P. 99US-0129674P. 99US-0141037P. 99US-0144758P. 99WO-US000106.

rng.res

ö Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S; Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Pan J, Paoni NP, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK; Williams PM, Wood WI; Human; secreted and transmembrane protein; PRO; gene therapy; vaccine; tissue typing; chromosome identification; vaccine; PCR; primer; SS. Novel secreted and transmembrane polypeptides and polynucleotides encoding them useful for treating various cardiac insufficiency disorders, bone and/or cartilage disorders such as sports injuries and Gaps Novel human secreted and transmembrane protein related primer #75. .; 0 Score 12.2; DB 1; Length 18; Pred. No. 5.9e+02; 0; Mismatches 3; Indels 98US-0098716P.
98US-009872P.
98US-0098750P.
98US-0098750P.
98US-0098812P.
98US-0099556P.
98US-0099556P.
98US-0099574P.
98US-0099742P.
98US-0099742P.
98US-0099782P.
98US-0099812P.
98US-0099812P.
98US-0099815P.
98US-0099815P.
98US-0099815P.
98US-0100388P.
98US-0100388P.
98US-0100388P.
98US-0100388P.
98US-0100388P.
98US-0100388P.
98US-0100388P.
98US-0100584P.
98US-0100662P.
98US-0100662P. 854 GICCIGGCICCAGIIGG 870 1 gracagecrecagries 17 ACD68069 standard; DNA; 18 BP 04-SEP-2001; 2001US-00946374 Query Match
Best Local Similarity 82.4%;
Matches 14; Conservative 17-SEP-2003 (first entry) WPI; 2003-492259/46. US2003073129-A1. 01-SEP-1998; 01-SEP-1998; 02-SEP-1998; 02-SEP-1998; 03-SEP-1998; 09-SEP-1998; 09-SEP-1998; 09-SEP-1998; 09-SEP-1998; 10-SEP-1998; 110-SEP-1998; 15-SEP-1998; 15-SEP-1998; 16-SEP-1998; 16-SEP-1998; 16-SEP-1998; 16-SEP-1998; 17-SEP-1998; 17-SEP-1998; 17-SEP-1998; 17-SEP-1998; 17-SEP-1998; Homo sapiens. 10-SEP-1998; 10-SEP-1998; 10-SEP-1998; 10-SEP-1998 10-SEP-1998 arthritis ACD68069; RESULT 572 ACD68069 THE EXXXXIII ð 셤

980x - 0100710P 980x - 0100919P 980x - 0100930P 980x - 0100848P 980x - 0100849P 980x - 0101014P 980x - 0101014P 980x - 010171P 980x - 010171P 980x - 010171P 980x - 0101472P 980x - 0101473P 980x - 0101474P 980x - 010144P 980x - 010254P 980x - 010331AP 980x - 010331SP	US-01036789 US-01036789 US-01036789 US-01042579 US-01042578 US-01050008 US-01050008 US-01052689 US-01052699 US-01058039 US-01058039 US-01058039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039 US-0106039
17-SEP-1998; 17-SEP-1998; 17-SEP-1998; 18-SEP-1998; 18-SEP-1998; 18-SEP-1998; 18-SEP-1998; 18-SEP-1998; 23-SEP-1998; 23-SEP-1998; 23-SEP-1998; 23-SEP-1998; 23-SEP-1998; 23-SEP-1998; 23-SEP-1998; 24-SEP-1998; 26-SEP-1998; 30-SEP-1998; 30-SE	-007-1998 -007-1998 -007-1998 -007-1998 -007-1998 -007-1998 -007-1998 -007-1998 -007-1998 -007-1998 -007-1998 -007-1998
# # # # # # # # # # # # # # # # # # #	

98US-0106932P.
98US-0108734P.
98US-0108775P.
98US-0108775P.
98US-0108787P.
98US-0108787P.
98US-0108802P.
98US-0108802P.
98US-0108867P.
98US-0108867P.
98US-0108867P.
98US-0108867P.
98US-010887P.
98US-010887P.
98US-010887P.
98US-010887P.
98US-010887P.
98US-010887P.
98US-010885P.
98US-010885P.
98US-010885P.
98US-011087P.
98US-011087P.
98US-011823P.
99US-011823P.
99US-011823P.
99US-011823P.
99US-0118323P.
99US-0118323P.
99US-0118323P.
99US-0118323P.
99US-0118323P. 99WO-US030095. 2000WO-US00219. 2000WO-US00376. 2000WO-US004565. 2000WO-US004542. 2000WO-US012454 2000WO-US012564 2000WO-US023328 2000WO-US0332873 2000WO-US0332873 2000WO-US0332873 2000WO-US0332873 2000WO-US032673 2001WO-US006520 2001WO-US006666 2001WO-US006666 2001WO-US006666 2001WO-US006666 2001WO-US017800 2001WO-US017800 2001WO-US017800 2001WO-US017800 2000WO-US006884. 2000WO-US013705. 2000WO-US014042. 2000WO-US005841 22-DEC-1998;
22-DEC-1998;
23-DEC-1998;
30-DEC-1999;
16-APR-1999;
23-JUN-1999;
23-JUN-2099;
16-DEC-1999;
17-MAY-2000;
17-MAY-2000;
17-MAY-2000;
17-MAY-2000;
17-MAY-2000;
17-MAY-2000;
17-MAY-2000;
11-MAY-2000;
11-DEC-2000;
11-DE 03-NOV-1998, 03-NOV-1998, 17-NOV-1998, 18-NOV-1998, 18-NOV-1998, 18-NOV-1998, 18-NOV-1998, 18-NOV-1998, 18-NOV-1998, 18-NOV-1998, 18-NOV-1998, 18-NOV-1998, 

## (GETH ) GENENTECH INC.

Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S; Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK; Williams PM, Wood WI;

## WPI; 2003-585292/55.

Novel isolated PRO polypeptides e.g. PRO1491 and PRO1571, useful in the preparation of a medicament for treating a condition responsive to PRO polypeptide, and as therapeutic agents e.g. vaccines.

ö

Gaps

.; 0

Indels

3,

```
Mismatches
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0098716P.
98US-0098733P.
98US-0098730P.
98US-0098603P.
98US-0098632P.
98US-0099856P.
98US-009956P.
98US-009966P.
98US-009966P.
98US-009960P.
98US-0099754P.
98US-0099754P.
98US-0099754P.
98US-0099754P.
98US-0099754P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9805-0100661P-
9805-0100661P-
9805-0100663P-
9805-0100683P-
9805-0100684P-
9805-0100710P-
9805-0100710P-
9805-0100710P-
9805-0100848P-
9805-0100848P-
9805-0100848P-
9805-0100848P-
9805-010088P-
9805-010088P-
9805-01014P-
                                770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0101474P.
98US-0101475P.
98US-0101476P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0100388P.
98US-0100390P.
98US-0100584P.
                                                                                                                                                  ADC18125 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0101472P
                                                                                                                                                                                                                                                                                                                                                                                                                                  10-DEC-2001; 2001US-00013907.
                                754 AGGGTCCCTAGGCCTCC
                                                                 17 AGGTCCCGCGGACTCC
                                                                                                                                                                                                                  (first entry)
 14; Conservative
                                                                                                                                                                                                                                                   Human PRO PCR primer #76
                                                                                                                                                                                                                                                                                                                                                                 US2003064925-A1.
                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .0-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .0-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-SEP-1998
                                                                                                                                                                                                                  18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .0-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .0-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                03-APR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    7-SEP-1998
                                                                                                                                                                                   ADC18125;
                                                                                                                   RESULT 574
 Matches
                                                                                                                                      ADC18125
                                                                                                                                                                     à
                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to a novel method for detecting and differentiating between colon cell proliferative disorders associated with at least one chewen colon cell proliferative disorders associated with at least one reagent or regions. The method comprises contacting a target nucleic acid in a biological sample obtained from the subject with at least one reagent or a series of reagents, where the reagent or series of reagents, distinguishes between methylated and non methylated CpG dinucleotides within the target nucleic acid. The molecules of the invention demonstrate cytostatic activity whilst the method may useful for detecting and differentiating between colon cell proliferative classification between colon cell proliferative classification state of solon adenoma and colon carcinoma. The PNA (peptide nucleic acid) -oligomers are useful as probes for determining cytosine methylation state or single nucleotide of the polymorphisms. The current sequence is that of the oligomoclectide of the invention which was used to analyse the CpG positions within the genomic live methylation is not shown within the specification but is
                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Detecting and differentiating between colon cell proliferative disorders associated with a gene or its regulatory regions comprises contacting a target nucleic acid in a biological sample obtained from the subject with
                                                                                                                                                                                                                                                                                                                                                                                                                   colon cell proliferative disorder; non methylated CpG dinucleotide; cytostatic; cancer; adenoma; carcinoma; cytosine methylation state; ss.
                                                                                                                                        Gaps
                                The invention describes an isolated PRO (secreted and transmembrane) polypeptide (I), having at least 80% sequence identity to a sequence selected from any one of the 123 amino acid sequences given in
                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide 6 used to analyse CpG positions within genomic DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lesche R;
                                                                                                                                        ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02;
                                                                                                       Length 18;
                                                                                                                                      3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nimmrich I, Becker E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18 BP; 2 A; 7 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                   Score 12.2; DB 1;
Pred. No. 5.9e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 39; SEQ ID NO 70; 74pp; English.
        Example 74; Page 255; 561pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Maier S,
                                                                                                                                        0
                                                                                                                                                                        854 GICCIGGCICCAGIIGG 870
                                                                                                                                                                                                    Gracadecrecadride 17
                                                                                                                                                                                                                                                                                        ADB54014 standard; DNA; 18 BP
                                                                                                       4.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-FEB-2003; 2003WO-EP002035.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-FEB-2002; 2002EP-00004551
                                                                                                                                                                                                                                                                                                                                                       04-DEC-2003 (first entry)
                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , Burger M,
Schmitt A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-731620/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003072821-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-SEP-2003
                                                                                                                                         14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Adorjan P,
Rujan T, S
```

caken

ADB54014;

Н

g

ò

RESULT 573

ADB54014/

Query Match

8 \$ 5 5 5 5

Matches

```
Human; PRO; PCR; ss; protein electrophoresis; chromosome mapping; genetic disorder; primer.
```

```
98US-0101916P
98US-0102207P
98US-0102340P
98US-0102330P
98US-0102331P
98US-0102331P
 98US-0101477P.
98US-0101479P.
98US-0101738P.
98US-0101741P.
98US-0101743P.
                                                                                                                                                                                                                                                                                                                                                                     9803-0103395P

9803-0103491P

9803-0103491P

9803-0103473P

9803-0103473P

9803-010427P

9803-010427P

9803-0105002P

9803-0105002P

9803-0105034P

9803-0105034P

9803-0105034P

9803-0105034P

9803-0105034P

9803-0106033P

9803-0106033P

9803-0106033P

9803-0106033P

9803-0106034P

9803-0106034P
                                                                                                                                                                                                  98US-0102487P.
98US-0102570P.
98US-0102571P.
98US-0102684P.
                                                                                                                                                                                                                                                               98US-0102687P.
98US-0102965P.
98US-0103258P.
                                                                                                                                                                                                                                                                                                          98US-0103449P.
98US-0103314P.
98US-0103315P.
98US-0103328P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0108806P
98US-0108807P
98US-0108867P
98US-0108925P
98US-0108848P
98US-0108848P
23-SEP-1998, 24-SEP-1998, 24-SEP-1998, 24-SEP-1998, 24-SEP-1998, 24-SEP-1998, 24-SEP-1998, 24-SEP-1998, 29-SEP-1998, 29-SEP-1998, 29-SEP-1998, 29-SEP-1998, 20-CT-1998, 20-CT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-NOV-1998;
17-NOV-1998;
18-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-NOV-1998;
```

```
The invention relates to human PRO polypeptides and the polymucleotides encoding them. The sequences are useful in the preparation of a medicament for treating a condition responsive to a PRO polypeptide. The polypeptides are useful in a number of functional biological assays, as molecular weight markers for procein electrophoresis and as therapeutic agents. The polynucleotides are useful as hybridisation probes for a CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel isolated PRO polypeptides e.g. PRO1491 and PRO1571, useful in the preparation of a medicament for treating a condition responsive to PRO polypeptide, and as therapeutic agents e.g. vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ferrara N, Fong S;
Gurney AL, Hillan KJ;
A, Tumas D, Watanabe (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Baker KP, Botstein D, Desnoyers L, Eaton DL, Fe
Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gu
Pan J, Paoni NF, Roy MA, Smith V, Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 12.2; DB 1;
Pred. No. 5.9e+02;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 74; SEQ ID NO 256; 555pp; English
                9805-0108851P

9805-0108852P

9805-0108964P

9805-0113296P

9805-0114223P

9905-0141037P

9905-0144758P

9905-0144758P

9906-010558P

9906-010558P

9906-010558P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000WO-US023328.
2000WO-US030952.
2000WO-US030873.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000WO-US032678.
2001WO-US006520.
2001WO-US006666.
2001WO-US017800.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.2%;
                                                                                                                                                                                                                                                                                                                                                                           99WO-US030095
2000WO-US000219
                                                                                                                                                                                                                                                                                                                                                                                                                       2000WO-US000376
2000WO-US003565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US005841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000WO-US006884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US013705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000WO-US014042
2000WO-US014941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US021066
2001WO-US021735
                                                                                                                                                                                                                                                                                                                                                           99WO-US028551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000WO-US004342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-US005004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US015264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000WO-US023522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US019692
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-SEP-2001; 2001US-00946374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gao W, Goddard A, Godowski
Pan J, Paoni NF, Roy MA,
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-555602/52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-DEC-2000; 28-FEB-2001; 201-MAR-2001; 201-JUN-2001; 22-JUN-2001; 229-JUN-2001; 2
                18-NOV-1998

18-NOV-1998

18-NOV-1998

18-NOV-1998

18-NOV-1998

18-NOV-1998

16-NOV-1998

16-NOV-1998

16-NOV-1999

11-NOV-1999

11-NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-AUG-2000;
24-AUG-2000;
08-NOV-2000;
10-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
```

Ŗ,

0

Gaps

.

Indels

870

854 GICCIGGCICCAGIIGG GTACAGGCTGCAGTTGG

ò g

Best_Local Similarity 82.4 Matches 14; Conservative

17

```
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                        03-NOV-1
03-NOV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-NOV-1
17-NOV-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-NOV-
Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour;
                                                                                       immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endochelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                 Human secreted/transmembrane protein PRO1480 PCR primer #3
                                                                                                                                                                                                       98US-0098716P.
98US-0098749P.
98US-00988749P.
98US-0098871P.
98US-0098871P.
98US-0098871P.
98US-0099562P.
98US-0099562P.
98US-0099562P.
98US-0099754P.
98US-0099763P.
98US-0099812P.
98US-01099862P.
98US-0109884P.
98US-0109884P.
98US-0100388P.
98US-010038P.
98US-010038P.
98US-010048P.
98US-0100664P.
98US-0100664P.
98US-0100664P.
98US-010064P.
98US-010064P.
98US-010064P.
98US-010064P.
98US-010064P.
98US-010064P.
98US-010064P.
98US-010064P.
98US-010071P.
98US-010071P.
98US-010171P.
98US-010177P.
98US-010177P.
98US-010177P.
98US-010177P.
98US-010177P.
                ADD70771 standard; DNA; 18 BP
                                                                                                                                                                                        12-DEC-2001; 2001US-00015386
                                                 (first entry)
                                                                                                                                                         US2003099625-A1.
                                                                                                                                                                                                        01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
09-SEP-1998;
09-SEP-1998;
09-SEP-1998;
10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
11-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18 - SEP - 1998

22 - SEP - 1998

23 - SEP - 1998
                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-SEP-1998;
23-SEP-1998;
24-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-1998;
                                                 15-JAN-2004
                                                                                                                                                                          29-MAY-2003
                                ADD7071;
 RESULT 575
           ADD70771
```

```
98US-0101741P.
98US-0101743P.
98US-0101216P.
98US-01022407P.
98US-0102330P.
98US-0102331P.
98US-0102484P.
98US-0102484P.
98US-0102684P.
98US-0102684P.
98US-0102684P.
98US-0102684P.
98US-01033314P.
98US-0103631P.
98US-010363P.
98US-010563P.
98US-010563P.
98US-010563P.
98US-010603P.
98US-010603P.
98US-010603P.
98US-010603P.
98US-010603P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0106464P

98US-0106956P-

98US-0106902P-

98US-0106913P-

98US-0106913P-

98US-0106914P-

98US-0106914P-

98US-0106914P-

98US-010775P-

98US-0108779P-

98US-0108779P-

98US-010878P-

98US-010878P-

98US-010878P-

98US-010880P-

98US-010880P-

98US-010880P-

98US-010880P-

98US-010880P-

98US-010880P-

98US-010880P-

98US-0108867P-

98US-0108849P-

98US-0108849P-

98US-0108849P-
24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
29-SEP-1998;
29-SEP-1998;
29-SEP-1998;
30-SEP-1998;
30-SE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998;
```

```
98US-0108904P.
98US-0113296P.
99WS-0114231P.
99WS-0129674P.
99US-0141037P.
99US-0144788P.
                                                                                    99WO-US021194.
                                                                                           99US-0162506P.
99WO-US028313.
                                                                                                                                                                     2000WO-US005841.
2000WO-US006884.
                                                                          99WO-US020111.
                                                                                                                                             2000WO-US003565.
                                                                                                                                                                                     2000WO-US013705.
2000WO-US014042.
                                                                                                                                                                                                       2000WO-US014941.
                                                                                                                                                                                                             2000WO-US015264.
2000WO-US023522.
                                                                                                                                                                                                                                               2000WO-US030873.
2000WO-US032678.
                                                                                                                                                                                                                                                      01-DEC-2000; 2000WO-US032678
28-F8B-2001; 2001WO-US006520.
01-MAR-2001; 2001WO-US006650.
01-UNN-2001; 2001WO-US017800.
                                                                                                            99WO-US028551
                                                                                                                            2000WO-US000219
                                                                                                                                    2000WO-US000376
                                                                                                                                                              2000WO-US005004
                                                                                                                                                                                                                               2000WO-US023328
                                                                                                                                                                                                                                        2000WO-US030952
                                                                                                                                                                                                                                                                                       20-JUN-2001; 2001WO-US019692
29-JUN-2001; 2001WO-US021066
                                                                                                                                                                                                                                                                                                         2001WO-US021735
                                                                                                                                                                                                                                                                                                                 04-SEP-2001; 2001US-00946374
                                                                                                                                                                                                                                                                                                                                                  Baker KP, Botstein D,
                                                                                                                                                                                                                                                                                                                                 (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                        Goddard A,
Paoni NF, F
                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-874602/81.
                                                                                                                                  06-JAN-2000;
11-FEB-2000;
24-FEB-2000;
02-MAR-2000;
15-MAR-2000;
22-MAY-2000;
30-MAY-2000;
30-MAY-2000;
23-AUG-2000;
23-AUG-2000;
23-AUG-2000;
20-NOV-2000;
10-NOV-2000;
                                                                         01-SEP-1999;
15-SEP-1999;
29-0CT-1999;
30-NOV-1999;
02-DEC-1999;
16-DEC-1999;
05-JAN-2000;
18-NOV-1998;
22-DEC-1998;
30-DEC-1998;
05-JAN-1999;
16-APR-1999;
23-JUN-1999;
26-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                          Williams PM,
                                                                                                                                                                                                                                                                                                                                                        Gao W,
```

Watanabe CK; Fong S; Hillan KJ; Ferrara N, Gurney AL, 1 rtstein D, Desnoyers L, Eaton DL, F Ird A, Godowski PJ, Grimaldi JC, Gu NF, Roy MA, Smith V, Stewart TA, Wood WI;

Novel isolated PRO polypeptides e.g., PRO1130, PRO1275, PRO1418, PRO1555, PRO1787 affect glucose or free fatty acid (FFA) uptake by skeleral muscle cells and are useful for treating diabetes or hyper- or hypo-insulinemia.

Example 74; SEQ ID NO 256; 553pp; English

The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity Length 18; 4.2%; Score 12.2; DB 1; 32.4%; Pred. No. 5.9e+02; tve 0; Mismatches 3; Query Match

82.4%;

Local Similarity 82.4 hes 14; Conservative

Matches

```
854 GICCIGGCICCAGIIGG 870
                    GracaGcracaGrrag 17
                   Н
\delta
                 셤
```

ADD39848 standard; DNA; 18 ADD39848; 576 ADD39848 ID ADD3 XX AC ADD3 XX DT 15-J RESULT

BP.

15-JAN-2004 (first entry)

Human secreted/transmembrane protein PRO1480 PCR primer #3.

Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.

Homo sapiens

JS2003083462-A1.

```
01-MAY-2003
```

10-DEC-2001; 2001US-00013913

```
2000WO-US014941.
2000WO-US015264.
2000WO-US023522.
2000WO-US023328.
                                                                                                                                                                                                                                                2001WO-US017800
                                                                                                                                         2000WO-US000219
2000WO-US000376
                                                                                                                                                                2000WO-US005004
                                                                                                                                                                            2000WO-US006884
                                                                                                                                                                                2000WO-US013705
2000WO-US014042
                                                                                                                                                                                                                                           2001WO-US006666
                                                                                                                                                                                                                                                           2001WO-US021066
                                                                                                                                                                                                                                                                 09-JUL-2001; 2001WO-US021735
04-SEP-2001; 2001US-00946374
                                                                                                                              99WO-US028551
                                                                                                                                    99WO-US030095
                                                                                                                                                    2000WO-US003565
                                                                                                                                                           2000WO-US004342
                                                                                                                                                                      2000WO-US005841
                                                                                                                                                                                                                    2000WO-US030952
                                                                                                                                                                                                                          2000WO-US030873
                                                                                                                                                                                                                               2000WO-US032678
                                                                                                                                                                                                                                     2001WO-US006520
                                                                                                                                                                                                                                                     2001WO-US019692
                                                                                                            01-SEP-1999;
15-SEP-1999;
30-NOV-1999;
                                                                                                                                                    11-FEB-2000;
18-FEB-2000;
                                                                                                                                                                24-FEB-2000;
                                                                                                                                                                     02-MAR-2000;
                                                                                                                                                                            15-MAR-2000;
                                                                                                                                                                                17-MAY-2000;
22-MAY-2000;
                                                                                                                                                                                             30-MAY-2000;
                                                                                                                                                                                                  02-JUN-2000;
                                                                                                                                                                                                       23-AUG-2000;
                                                                                                                                                                                                             24-AUG-2000;
                                                                                                                                                                                                                    08-NOV-2000;
                                                                                                                                                                                                                        10-NOV-2000;
01-DEC-2000;
                                                                                                                                                                                                                                    28-FEB-2001;
                                                                                                                                         05-JAN-2000;
                                                                                                                                              06-JAN-2000;
                                                                                                      05-JAN-1999;
                                                                                                                             02-DEC-1999
```

#### (GETH ) GENENTECH INC.

ĊĶ; Fong S; Hillan KJ; Watanabe Ferrara N, Gurney AL, A, Tumas D, Baker KP, Botstein D, Desnoyers L, Eaton DL, F Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gu Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Goddard A, Godowsk Paoni NF, Roy MA, s PM, Wood WI; Williams PM,

#### WPI; 2003-755122/71.

New secreted and transmembrane PRO polypeptides useful for treating cancers, kidney disorders, Crohn's disease, diabetes mellitus, hyper- or hypo-insulinemia, sports injuries and arthritis.

## Example 74; SEQ ID NO 256; 557pp; English.

ö

Gaps

; 0

Indels

The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity on amino acid sequence chosen from 123 fully defined sequences as given in the specification (including their extracellular domains either or without their associated signal peptides. Also include are the nuclectide (NA) sequences encoding PRO, a vector comprising the PRO NA, a host cell comprising the vector, producing PRO, a chimaeric molecule comprising PRO fused to a heterologous amino acid sequence, and an antier PRO antibody. Pro is useful as molecular weight markers for protein electrophoresis and also for chromosome identification. PRO is also

```
useful for tissue typing. PRO and PRO NA are useful as hybridisation probes for a cDNA library to isolate the full-length PRO cDNA. PRO NA is useful for generating transgenic animals or knock-out animals which are useful in development and screening useful reagents. PRO NA is also useful in development and screening useful reagents. PRO NA is also useful in gene therapy. PRO1244, PRO1250, PRO1418 and PRO1410 c useful for treating cancerous tumours. PRO1250, PRO1418 and PRO1410 c polypeptides are useful for suppressing immune response. PRO1246 and PRO1246 polypeptide is also useful for treating cardiac insufficiency disorders. PRO1246 polypeptide are useful for stimulating calcium flux in human cumbilical vein endothelial cells. PRO1250 and PRO1474 collypeptides are useful for treating bone and/or cartilage disorders of polypeptides are useful for treating bone and/or cartilage disorders (e.g., arthritis) and wound healing. PRO1130, PRO1255 and PRO1418 collypeptides are useful for treating diabetes in skeletal muscle cells and obesity. PRO1265, PRO1244 and PRO1382 polypeptides are useful for treating diabetes in skeletal muscle cells and obesity. PRO1265, PRO1244 and PRO1382 polypeptides are useful for treating diabetes. PRO1418, C disease. PRO1478, PRO1265, PRO1418, PRO1410 and PRO1575 are useful in treating thalassaemias. The present the invartion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.2%; Score 12.2; DB 1; Length 18; 12.4%; Pred. No. 5.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seguence 18 BP; 3 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       854 GICCIGGCICCAGIIGG 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          gracagecrecaerree 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       82.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          qq
```

9805-0099816P-9805-0100385P-9805-0100398P-9805-0100584P-9805-0100661P-9805-0100661P-9805-0100664P-9805-0100664P-9805-0100664P-

10.5EP-1998; 10.5EP-1998; 10.5EP-1998; 15.5EP-1998; 15.5EP-1998; 16.5EP-1998; 16.5EP-1998; 16.5EP-1998; 16.5EP-1998; 16.5EP-1998; 17.5EP-1998; 17.5EP-1998;

98US-0100684P. 98US-0100684P. 98US-0100711P. 98US-0100919P. 98US-0100930P. 98US-0100848P.

98US-0100849P-98US-010104P-98US-0101071P-98US-0101279P-98US-0101471P-98US-0101472P-98US-0101475P-98US-0101476P-98US-0101476P-98US-0101476P-98US-0101477P-98US-0101477P-98US-0101477P-98US-0101477P-98US-0101477P-

98US-0101916P. 98US-0102207P. 98US-0102240P. 98US-0102307P. 98US-0102331P.

ADD70294;

577

ADD70294 RESULT

```
20-OCT-1998;
21-OCT-1998;
22-OCT-1998;
                                                                                                                                                                          18-SEP-1998;
18-SEP-1998;
18-SEP-1998;
18-SEP-1998;
22-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-0CT-1998;
27-0CT-1998;
                                                                                                                                                                                                                                                                                                                                         29-SEP-1998;
29-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                     30-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                      30-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                               01-OCT-1998;
                                                                                                                                                                                                                                                                                    24-SEP-1998;
                                                                                                                                                                                                                                                                                                                24-SEP-1998;
                                                                                                                                                                                                                                                                                                                       24-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-OCT-1998
                                                                                                                                                                                                                                                                                                                                                            29-SEP-1998
                                                                                                                                                                                                                                                                   23-SEP-15
23-SEP-15
                                                                                                                                                                                                                                                                                              24-SEP-1
                                                                                                                                                                                                                                                   23-SEP-1
                                                                                                                                                                                                                                                                                                      24-SEP-1
Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                                                                                                                                                                                                                                                    Human secreted/transmembrane protein PRO1480 PCR primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0098750P.
98US-0098803P.
98US-0098821P.
98US-0098843P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0099642P.
98US-0099741P.
98US-0099754P.
98US-0099763P.
                                                                                                                                                                                                                                                                                                                 ADD70294 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-DEC-2001; 2001US-00006818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0098723P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0099536P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0099598P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0099602P
                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US2003054406-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-SEP-1998;
02-SEP-1998;
02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-1998;
10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                    15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-SEP-1998
01-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-SEP-1998
```

98US-0102484P.
98US-0102487P.
98US-0102571P.
98US-0102684P.
98US-0102684P.
98US-0102684P.
98US-0103288P.
98US-010331449P.
98US-01033148P.
98US-0103318P.
98US-0103318P.
98US-0103318P.
98US-0103318P.
98US-0103379P.
98US-0103677P.
98US-0103771P.
98US-01046977P.

98US-0105694P. 98US-0105807P. 98US-0105881P. 98US-0105882P.

98US-0105266P 98US-0105693P

```
23-AUG-2000; 2000MO-US023522.
24-AUG-2000; 2000MO-US023328.
08-NOV-2000; 2000MO-US0330873.
10-NOV-2000; 2000MO-US0330873.
01-DEC-2000; 2000MO-US0330678.
28-FEB-2001; 2001MO-US006520.
01-MAR-2001; 2001MO-US01666.
01-JUN-2001; 2001MO-US019692.
29-JUN-2001; 2001MO-US019692.
29-JUN-2001; 2001MO-US011666.
94US-0106062P.
98US-0106023P.
98US-0106030P.
98US-0106031P.
98US-0106031P.
98US-0106248P.
98US-0106248P.
98US-0106346P.
98US-010636SP.
98US-010636P.
                                                                                                                                                   9805-0107783P
9805-0108775P
9805-0108779P
9805-010878P
9805-0108788P
9805-0108801P
                                                                                                                                                                                                                 98US-0108806P
98US-0108807P
98US-0108925P
98US-010848P
98US-0108849P
98US-0108850P
98US-0108852P
98US-0108852P
98US-0108852P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000WO-US005004.
2000WO-US005841.
2000WO-US006884.
2000WO-US013705.
                                                                                                                                                                                                                                                                                                                                            9905-0129674P
9905-0141037P-
9905-0144758P-
9905-0145698P-
9900-0502111-
9900-05021194-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAY-2000; 2000WO-US014941.
02-JUN-2000; 2000WO-US015264.
                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US028313.
99WO-US028551.
                                                                                                                                                                                                                                                                                                                   98US-0113296P.
98US-0114223P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021735.
04-SEP-2001; 2001US-00946374.
                                                                                                                                                                                                                                                                                                                                     99WO-US000106
                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US030095
                                                                                                                                                                                                                                                                                                                                                                                                                                      2000WO-US000219
                                                                                                                                                                                                                                                                                                                                                                                                                                               2000WO-US000376
                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000WO-US003565.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000WO-US004342.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US014042
                                                                                                                                                                                                                                                                                                                                                                                                         30-NOV-1999;
02-DEC-1999;
16-DEC-1999;
05-JAN-2000;
06-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-MAY-2000; 22-MAY-2000; 230-MAY-2000; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24-FEB-2000;
02-MAR-2000;
15-MAR-2000;
       28-0CT-1998
28-0CT-1998
28-0CT-1998
28-0CT-1998
28-0CT-1998
29-0CT-1998
29-0CT-1998
30-0CT-1998
31-0CT-1998
31-0CT-1998
31-0CT-1998
31-0CT-1998
31-0CT-1998
                                                                                                                         03-NOV-1998

03-NOV-1998

03-NOV-1998

10-NOV-1998

17-NOV-1998

17-NOV-1998

17-NOV-1998

17-NOV-1998

17-NOV-1998

17-NOV-1998

17-NOV-1998

17-NOV-1998
                                                                                                                                                                                                                                                    18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-FEB-2000;
18-FEB-2000;
                                                                                                                                                                                                                                    17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                   22-DEC-1998;
30-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                 01-SEP-1999;
15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                      05-JAN-1999
                                                                                                                                                                                                                                                                                                                                              16-APR-1999;
                                                                                                                                                                                                                                                                                                                                                        23-JUN-1999
                                                                                                                                                                                                                                                                                                                                                               20-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                   29-OCT-1999
```

(GETH ) GENENTECH INC.

```
Fong S;
Hillan KJ;
Watanabe CK;
                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                                                        or
identity
                                                                                                                                                                                                                                   Gaps
                                                                                             Novel isolated PRO polypeptide useful for tissue typing, modulating biological activity of cell, as molecular weight markers in protein
                                                                                                                                                                    The invention relates to an isolated PRO polypeptide (secreted transmembrane protein) having at least 80% amino acid sequence
                                                                                                                                                                                                                                   ·;
 baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, E Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Williams PM, Wood WI;
                                                                                                                                                                                                         4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                       Human secreted/transmembrane protein PRO1480 PCR primer #3.
                                                                                                                                                                                                                                 Indels
                                                                                                                       electrophoresis, for treating arthritis, tumor
                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                Example 74; SEQ ID NO 256; 549pp; English.
                                                                                                                                                                                                                                                         854 GTCCTGGCTCCAGTTGG 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0098716P.
98US-009873P.
98US-0098750P.
98US-009881P.
98US-0098843P.
98US-00998843P.
98US-009959B.
98US-009959B.
98US-009973P.
98US-009973P.
98US-009973P.
98US-009973P.
                                                                                                                                                                                                                                                                                 1 Gracageriecaerres 17
                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-DEC-2001; 2001US-00012755.
                                                                                                                                                                                                                                                                                                                                              ADD38415 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                             15-JAN-2004 (first entry)
                                                                                                                                                                                                      Query Match
Best Local Similarity 82.4°
Matches 14, Conservative
                                                                      WPI; 2003-708344/67.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US2003096955-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-SEP-1998;
02-SEP-1998;
02-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-SEP-1998;
15-SEP-1998;
15-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-SEP-1998;
01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                      ADD38415;
                                                                                                                                                                                                                                                                                                                       RESULT 578
ADD38415
à
                                                                                                                                                                                                                                                                                 d
```

225 235 247 247 247 247 247 247 247 247 247 247	77777777777777777777777777777777777777	884 P. F.	2099397 00747 00747 2039 3306 488 488
US-01003 US-01005 US-01006 US-01006 US-01006 US-01006 US-01006 US-01006 US-01007 US-01007 US-01007 US-01008	1005-01012 1015-01014 1015-01014 1015-01014 1015-01014 1015-01014 1015-01014 1015-01014 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-01017 1015-0107 1015-0107 1015-0107 1015-0107 1015-0107 1015-0107 1015-0	9808-0102689808-0102689808-0102689808-0102689808-0102689808-0103299808-0103389808-0103389808-0103389808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-0103489808-01034898808-01034898808-01034898808-01034898808-01034898808-01034898808-01034898808-01034898808-01034898808-010348988888-01034898888-01034898888-01034898808-01034898888-0103489888-01034898888-0103489888-0103489888-010348988-010348988-010348988-010348988-010348988-010348988-0103489888-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348888-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-010348988-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-01034898-01034898-01034898-010348988-01034898-01034898-01034898-010348988-01034898-01034898-010348988-01034898-010348988-010348988-010348988-01034898-01034898-010	802-01058 803-01056 803-01056 803-01056 803-01056 803-01066 803-01066 803-01066 803-01066 803-01066
1998; 1998; 1998; 1998; 1998; 1998; 1998; 1998; 1998; 1998; 1998; 1998;		10000000000000000000000000000000000000	10000000000000000000000000000000000000
15-SEP 16-SEP 16-SEP 16-SEP 16-SEP 17-SEP 17-SEP 17-SEP 17-SEP 17-SEP 17-SEP 17-SEP 17-SEP 17-SEP 17-SEP 17-SEP 17-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18-SEP 18	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	00000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
%	X		X

Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S; Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK; Williams PM, Wood WI;

```
26-0CT-1998
27-0CT-1998
27-0CT-1998
27-0CT-1998
28-0CT-1998
28-0CT-1998
28-0CT-1998
28-0CT-1998
28-0CT-1998
29-0CT-1998
29-0CT-1998
29-0CT-1998
                         17-SEP-1998
17-SEP-1998
17-SEP-1998
18-SEP-1998
18-SEP-1998
18-SEP-1998
18-SEP-1998
18-SEP-1998
23-SEP-1998
23-SEP-1998
23-SEP-1998
23-SEP-1998
23-SEP-1998
23-SEP-1998
23-SEP-1998
23-SEP-1998
24-SEP-1998
24-SEP-1998
24-SEP-1998
24-SEP-1998
24-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-SEP-1998;
29-SEP-1998;
29-SEP-1998;
29-SEP-1998;
29-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-SEP-1998;
30-SEP-1998;
30-SEP-1998;
30-SEP-1998;
30-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-0CT-1998;
07-0CT-1998;
07-0CT-1998;
08-0CT-1998;
08-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-0CT-1998;
14-0CT-1998;
20-0CT-1998;
20-0CT-1998;
21-0CT-1998;
21-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-OCT-1998;
26-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-OCT-1998
06-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-0CT-1998
07-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-0CT-1998
07-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-OCT-1998
         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity to an amino acid sequence chosen from 123 fully defined sequences as
Novel isolated PRO polypeptide, useful for treating cancerous tumors, cardiac insufficiency disorders, wound healing, diabetes mellitus, thalassemias.
                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                            4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human secreted/transmembrane protein PRO1480 PCR primer #3
                                                                                           Example 74; SEQ ID NO 256; 556pp; English.
                                                                                                                                                                                                                                                                                                                       870
                                                                                                                                                                                                                                                                                                                                                        GTACAGGCTGCAGTTGG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US - 0098723P - 98US - 0098723P - 98US - 0098872P - 98US - 0098872P - 98US - 0098872P - 98US - 0099873P - 98US - 0099536P - 98US - 0099542P - 98US - 0099754P - 98US - 009975P - 98US - 0099815P - 98US - 0100388P - 98US - 010058P - 98US - 010058P - 98US - 010054P - 98US - 010054P - 98US - 0100564P -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-DEC-2001; 2001US-00011671
                                                                                                                                                                                                                                                                                                                     854 GTCCTGGCTCCAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADD39371 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                     Query Match
Best Local Similarity 82.4°
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003096954-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-SEP-1998)
09-SEP-1998)
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
11-SEP-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-SEP-1998,
01-SEP-1998,
02-SEP-1998,
02-SEP-1998,
02-SEP-1998,
09-SEP-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAY-2003
                                                                                                                                                                                                                                                                                                                                                               _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADD39371;
                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 57
ADD3 9371
D ADD3 9371
XX ADD3 9371
D LS-L
XX I Huna
XX I
```

```
98US-0100710P

98US-0100843P

98US-0100843P

98US-0100843P

98US-0101071P

98US-0101071P

98US-0101071P

98US-0101071P

98US-0101071P

98US-0101741P

98US-010264P

98US-010264P

98US-010314P

98US-01031P

98US-0105001P

98US-0105001P

98US-0105031P

98US-0106031P

98US-0106031P

98US-0106031P

98US-0106031P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0106856P.
98US-0106902P.
98US-0106905P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0106248P.
98US-0106384P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0108500P.
98US-0106464P.
```

```
11-FEB-2000; 2000WO-US003565.
18-FEB-2000; 2000WO-US0034342.
22-FEB-2000; 2000WO-US004342.
15-MAR-2000; 2000WO-US005841.
15-MAR-2000; 2000WO-US005841.
17-MAY-2000; 2000WO-US014042.
30-MAY-2000; 2000WO-US014042.
30-MAY-2000; 2000WO-US014041.
23-AUG-2000; 2000WO-US015264.
23-AUG-2000; 2000WO-US03328.
08-NOV-2000; 2000WO-US0330873.
01-DEC-2000; 2000WO-US0330873.
01-DEC-2000; 2000WO-US0330873.
01-DEC-2000; 2000WO-US0330873.
01-DEC-2000; 2000WO-US0330873.
                                                                                          98US-0108867P.
98US-0108867P.
98US-0108848P.
98US-0108848P.
98US-0108850P.
                                                                                                                                                  98US-0108852P.
98US-0108858P.
98US-0113296P.
98US-0113296P.
98US-0114223P.
99WO-US000106.
                                                                                                                                                                                                   99US-0129674P.
99US-0141037P.
99US-0144758P.
99US-0145698P.
98US-0106919P.
98US-0106934P.
98US-0106934P.
98US-0107733P.
98US-0108775P.
98US-0108779P.
                                                                                                                                                                                                                                                            99WO-US028313.
99WO-US028551.
                                                                                                                                                                                                                                                                                            2000WO-US000376.
2000WO-US003565.
                                                                                                                                                                                                                                     99WO-US020111.
                                                         98US-0108788P.
                                                                          98US-0108802P.
98US-0108806P.
                                                                                                                                                                                                                                            99WO-US021194.
                                                                                                                                                                                                                                                                              36003030086
                                                                                                                                                                                                                                                                                      2000WO-US000219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                             16-DEC-1999;
05-JAN-2000;
06-JAN-2000;
                                                                                                                 16. NOV-1998;
18. NOV-1998;
18. NOV-1998;
18. NOV-1998;
18. NOV-1998;
18. NOV-1998;
30. DEC-1998;
                                                                                                                                                                                                   16-APR-1999;
23-JUN-1999;
20-JUL-1999;
26-JUL-1999;
                                                                                                                                                                                                                                    01-SEP-1999;
15-SEP-1999;
29-OCT-1999;
                                                         17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                            30-NOV-1999;
02-DEC-1999;
                                                                                                                                                                                            05-JAN-1999
                                                                                          17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Baker KP,
```

Fong S; Hillan KJ; Watanabe CK; Ferrara N, Gurney AL, A, Tumas D, Botstein D, Desnoyers L, Baton DL, Fé ddard A, Godowski PJ, Grimaldi JC, Gu oni NF, Roy MA, Smith V, Stewart TA, Gao W, Goddard A, Godowsk Pan J, Paoni NF, Roy MA, Williams PM, Wood WI;

## WPI; 2003-786999/74.

Novel isolated PRO polypeptide useful for tissue typing, modulating biological activity of cell, as molecular weight markers in protein electrophoresis, for treating arthritis, tumor.

Example 74; SEQ ID NO 256; 550pp; English

```
0
                                                                                                                                                                                                                                   Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity
                                                      Gaps
                                                      .,
                                                                                                                                                                                                                 Human secreted/transmembrane protein PRO1480 PCR primer #3
                                4.2%; Score 12.2; DB 1; Length 1 ilarity 82.4%; Pred. No. 5.9e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                               98US-0098716P.
98US-009873P.
98US-009873P.
98US-009863P.
98US-009863P.
98US-0099536P.
98US-0099536P.
98US-0099586P.
98US-00995887P.
98US-0099754P.
98US-0099778P.
98US-0099778P.
98US-0099778P.
98US-0099778P.
98US-0099778P.
98US-010938P.
98US-010038P.
98US-010038P.
98US-0100584P.
98US-0100584P.
98US-0100584P.
98US-0100664P.
98US-0100664P.
98US-0100664P.
98US-010064P.
98US-010064P.
98US-010064P.
                                                                            854 GICCIGGCICCAGTIGG 870
                                                                                               Gracagericcaerree 17
                                                                                                                                                     ADD38894 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                            06-DEC-2001; 2001US-00007194
                                                                                                                                                                                              (first entry)
                                          Local Similarity
nes 14; Conserv
                                                                                                                                                                                                                                                                                                                                    US2003092061-A1.
                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-SEP-1998
                                                                                                                                                                                               15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                         15-MAY-2003
                                                                                                                                                                          ADD38894;
                                                                                                 Н
                                   Query Match
                                                                                                                                RESULT 580
                                                       Matches
                                                                                                                                            ADD38894
                                                                                                                                                                 g
     888
                                                                              ð
```

```
980S-0101014P

980S-0101068P

980S-010147P

980S-010147P

980S-010147P

980S-010147P

980S-010147P

980S-010147P

980S-010147P

980S-010147P

980S-010141P

980S-010141P

980S-010141P

980S-010254P

980S-010333P

980S-010333P

980S-010563P

980S-010563P

980S-010563P

980S-010603P

980S-010603P
18 - SEP - 1998

18 - SEP - 1998

22 - SEP - 1998

23 - SEP - 1998

23 - SEP - 1998

23 - SEP - 1998

24 - SEP - 1998

25 - SEP - 1998

26 - SEP - 1998

27 - SEP - 1998

28 - SEP - 1998

29 - SEP - 1998

20 - SEP - 1998

20 - SEP - 1998

21 - SEP - 1998

22 - SEP - 1998

23 - SEP - 1998

24 - SEP - 1998

25 - SEP - 1998

26 - SEP - 1998

27 - SEP - 1998

28 - SEP - 1998

29 - SEP - 1998

20 - SEP - 1998

20 - SEP - 1998

21 - SEP - 1998

22 - SEP - 1998

23 - SEP - 1998

24 - SEP - 1998

25 - SEP - 1998

26 - SEP - 1998

27 - SEP - 1998

28 - SEP - 1998

29 - SEP - 1998

20 - S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-071-1998
07-071-1998
07-071-1998
07-071-1998
08-071-1998
08-071-1998
08-071-1998
08-071-1998
08-071-1998
20-071-1998
20-071-1998
20-071-1998
20-071-1998
20-071-1998
21-071-1998
22-071-1998
22-071-1998
22-071-1998
22-071-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-OCT-1998
28-OCT-1998
28-OCT-1998
28-OCT-1998
28-OCT-1998
28-OCT-1998
29-OCT-1998
30-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-NOV-1998;
03-NOV-1998;
03-NOV-1998;
03-NOV-1998;
03-NOV-1998;
10-NOV-1998;
```

```
02-JUN-2000; 2000WO-USG15264;
23-AUG-2000; 2000WO-USG15252;
24-AUG-2000; 2000WO-USG33522;
08-NOV-2000; 2000WO-USG3328;
10-NOV-2000; 2000WO-USG30873;
10-NOV-2000; 2000WO-USG30873;
01-DEC-2000; 2000WO-USG32678;
28-FEB-2001; 2001WO-USG0666;
01-JUN-2001; 2001WO-USG17800;
29-JUN-2001; 2001WO-USG19692;
29-JUN-2001; 2001WO-USG19692;
99-JUN-2001; 2001WO-USG1966;
98US-010878BP

98US-0108801P

98US-0108806P

98US-0108867P

98US-0108848P

98US-0108848P

98US-0108850P

98US-0108851P

98US-0108858P

98US-0108904P

99US-011323P

99US-011323P

99US-0113774P

99US-014569BP

99US-014569BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000WO-US00376.
2000WO-US003565.
2000WO-US004342.
2000WO-US005004.
2000WO-US005841.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-US013705.
2000WO-US014042.
2000WO-US014941.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US030095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000WO-US006884
                                                                                                                                                                                                                                                                                                                                                                                                                             20 - JUL - 1999

26 - JUL - 1999

15 - SEP - 1999

16 - SEP - 1999

29 - COT - 1999

30 - NOV - 1999

16 - DEC - 1999

17 - AAN - 2000

18 - FEB - 2000

18 - FEB - 2000

22 - MAR - 2000

21 - MAR - 2000

22 - MAR - 2000

23 - MAY - 2000

24 - MAR - 2000

25 - MAY - 2000

26 - MAY - 2000

27 - MAY - 2000

27 - MAY - 2000

28 - MAY - 2000

29 - MAY - 2000

20 - M
                                                                                                                                                        18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
22-DEC-1998;
30-DEC-1998;
05-AN-1999;
16-APR-1999;
23-JUN-1999;
```

## (GETH ) GENENTECH INC.

Watanabe CK; Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S; Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe (Williams PM, Wood WI;

#### WPI; 2003-765477/72.

New isolated PRO polypeptide such as PRO1560, PRO444, PRO1018, PRO1773, PRO1244, PRO1246, useful for treating cancerous tumors, cardiac insufficiency disorders, wound healing, Crohn's disease, celiac disease.

# Example 74; SEQ ID NO 256; 555pp; English.

The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity

Gaps .. 0 Query Match
4.2%; Score 12.2; DB 1; Length 18;
Best Local Similarity 82.4%; Pred. No. 5.9e+02;
Matches 14; Conservative 0; Mismatches 3; Indels

0

```
9805-01034499-9805-01033149-9805-01033149-9805-01033289-9805-01033289-9805-01033289-9805-0103495-9805-0103639-9805-01056948-9805-01056948-9805-01056948-9805-01056948-9805-01056948-9805-01056948-9805-01056948-9805-01056948-9805-01069339-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01069348-9805-01087758-9805-01087758-9805-01087758-9805-01087758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758-9805-010877758
98US-0101475P

98US-0101476P

98US-0101479P

98US-0101741P

98US-0101741P

98US-0101741P

98US-0101741P

98US-010123P

98US-0102240P

98US-0102240P

98US-0102340P

98US-0102340P

98US-0102340P

98US-0102340P

98US-0102340P

98US-0102340P

98US-0102340P

98US-0102340P

98US-0102340P

98US-0102571P

98US-0102571P

98US-0102571P

98US-0102571P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0108867P
98US-0108925P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0108806P
                                                                                                                                                                                                                                                     01-0CT-1998;
02-0CT-1998;
06-0CT-1998;
06-0CT-1998;
07-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                         07-0CT-1998;
08-0CT-1998;
08-0CT-1998;
08-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-0CT-1998;
27-0CT-1998;
27-0CT-1998;
27-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-OCT-1998;
28-OCT-1998;
29-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                       07-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                             14-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-0CT-1998;
21-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-0CT-1998;
22-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-OCT-1998;
28-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-OCT-1998,
29-OCT-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-OCT-1998
03-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                   07-OCT-1998
                                                                                                                                                                                                                                                                                                                                                              07-OCT-1998
    Human, PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endochielial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Hemoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                                                          Human secreted/transmembrane protein PRO1480 PCR primer #3
  854 GICCIGGCICCAGIIGG 870
                                                                                                                                                                                                                                                                                                                                                                                                     98US-0098716P

98US-0098729P

98US-0098720P

98US-0098750P

98US-0098843P

98US-0098843P

98US-00998643P

98US-0099559P

98US-0099559P

98US-00995741P

98US-0099741P

98US-010988P

98US-010038P

98US-010038P

98US-0100651P

98US-0100651P

98US-0100651P

98US-0100651P

98US-0100651P

98US-0100651P

98US-0100651P

98US-0100651P

98US-0100651P

98US-0100651P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0100848P.
98US-0100849P.
98US-0101014P.
98US-0101068P.
98US-0101071P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0101471P.
98US-0101472P.
98US-0101474P.
                           Gracaggergeagrieg 17
                                                                                             ADD40325 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                             06-DEC-2001; 2001US-00006117
                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                          US2003082627-A1.
                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-SEP-1998;
02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
09-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-SEP-1998;
09-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                    01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-SEP-1998
16-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-SEP-1998
17-SEP-1998
                                                                                                                                                 15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16-SEP-1998
                                                                                                                                                                                                                                                                                                                                                    01-MAY-2003
                                                                                                                       ADD40325;
                             Н
                                                                    RESULT 581
                                                                                 ADD40325
```

ADE50546 standard; DNA; 18 BP

Human secreted/transmembrane protein PRO1480 PCR primer #3.

(first entry)

29-JAN-2004

ADE50546;

```
Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New isolated PRO polypeptides such as PRO1560, PRO444, PRO1018, PRO1773, PRO1244, PRO1246, are useful for treating cancerous tumors and cardiac insufficiency disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hillan KU;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fong S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ferrara N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gurney AL,
A, Tumas D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Baker KP, Botstein D, Desnoyers L, Eaton DL, Fe
Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gur
Pan J, Paoni NP, Roy MA, Smith V, Stewart TA,
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.2%; Score 12.2; DB 1; 12.4%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 74; SEQ ID NO 256; 550pp; English.
                   98US-0108849P.
98US-0108851P.
98US-0108851P.
98US-0108858P.
98US-0108962P.
98US-0113296P.
99US-011323P.
99US-0141037P.
99US-0141037P.
                                                                                                                                                                                                                                                                                                                             99WO-US020111.
99WO-US021194.
99US-0162506P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000WO-US014042.
2000WO-US014941.
2000WO-US015264.
2000WO-US023522.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000WO-US032678.
2001WO-US006520.
2001WO-US006666.
2001WO-US017800.
                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US028551.
                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US028313
                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US030095.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000WO-US000376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000WO-US003565.
2000WO-US004342.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000WO-US005004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000WO-US005841.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000WO-US006884.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-US023328.
2000WO-US030952.
2000WO-US030873.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US019692
2001WO-US021066
2001WO-US021735
98US-0108848P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 l Similarity 82.4%;
14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001US-00946374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-755104/71.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                            16-DEC-1999;
05-JAN-2000;
06-JAN-2000;
06-JAN-2000;
11-FEB-2000;
24-FEB-2000;
02-MR-2000;
01-MAR-2000;
11-MAR-2000;
11-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-MAY-2000;
02-JUN-2000;
23-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-AUG-2000;
08-NOV-2000;
10-NOV-2000;
                                                                                                                                                                                                                                                        23 - JUN - 1999;
20 - JUL - 1999;
26 - JUL - 1999;
01 - SEP - 1999;
15 - SEP - 1999;
30 - NOV - 1999;
02 - DEC - 1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-SEP-2001;
PART BELLEVEN STANDER B
```

```
Human; PCR; primer, secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                                                                                                                                              98US-009959BP
98US-009959BP
98US-0099642P
98US-0099741P
98US-0099744P
98US-0099754P
98US-0099754P
                                                                                                                                                                                                                                                                                                                                         98US-0099812P
98US-0099815P
98US-010038BP
98US-010038BP
98US-0100584P
98US-0100662P
98US-0100662P
98US-0100664P
98US-0100664P
98US-0100684P
98US-0100684P
98US-0100710P
98US-0100710P
98US-0100919P
                                                                                                                                                                                                             98US-0098749P.
98US-0098750P.
98US-0098803P.
98US-0098821P.
98US-0098843P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             980S-0100849P.
980S-010104P.
980S-0101071P.
980S-0101279P.
980S-0101474P.
980S-0101474P.
980S-0101476P.
980S-0101476P.
                                                                                                                                                                                             98US-0098716P.
98US-0098723P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0101741P.
98US-0101743P.
                                                                                                                                                                            11-DEC-2001; 2001US-00015393
                                                                                                                                           US2003069179-A1.
                                                                                                                            Homo sapiens.
                                                                                                                                                                                            01-SEP-1998,
01-SEP-1998,
01-SEP-1998,
02-SEP-1998,
02-SEP-1998,
02-SEP-1998,
03-SEP-1998,
03-SEP-1998,
03-SEP-1998,
03-SEP-1998,
                                                                                                                                                                                                                                                                                                                         10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                    16-SEP-1998;
16-SEP-1998;
17-SEP-1998;
                                                                                                                                                                                                                                                                       09-SEP-1998;
                                                                                                                                                                                                                                                                                        09-SEP-1998
                                                                                                                                                                                                                                                                                                         10-SEP-1998
10-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                           15-SEP-1998
15-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-1998
                                                                                                                                                             10-APR-2003
                                                                                                                                                                                                                                                                                                                                                   10-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                   15-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                            16-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                     16-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                            16-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       L7-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7-SEP-1998
```

ò

Gaps

.; 0

3; Indels

Mismatches

. 0 870

17

GTCCTGGCTCCAGTTGG 

854

à g RESULT 582 ADE50546

Best Loca Matches

```
24-SEP-1996 98US-010131FP.
25-SEP-1996 98US-010131FP.
25-SEP-1996 98US-010230P.
25-SEP-1996 98US-010220P.
25-SEP-1998 98US-010220P.
25-SEP-1998 98US-010220P.
25-SEP-1998 98US-010230P.
25-SEP-1998 98US-010230P.
25-SEP-1998 98US-010230P.
25-SEP-1998 98US-010230P.
25-SEP-1998 98US-010238P.
25-SEP-1998 98US-010328P.
25-SEP-1998 98US-010328P.
25-SEP-1998 98US-010328P.
25-SEP-1998 98US-010534P.
26-SEP-1998 98US
```

```
The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S; Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe C Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel secreted and transmembrane PRO polypeptides useful in the preparation of a medicament for treating a condition responsive to PRO polypeptide and as therapeutic agents e.g. vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.2%; Score 12.2; DB 1; Length 18; Best Local Similarity 82.4%; Pred. No. 5.9e+02; Matches 14; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 74; SEQ ID NO 256; 555pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HLA class I allele specific primer #143.
                                                                                                                                                                                   16 - DAN - 2000; 2000WO-US000219.
16 - FEB - 2000; 2000WO-US000376.
11 - FEB - 2000; 2000WO-US000376.
18 - FEB - 2000; 2000WO-US000376.
19 - FEB - 2000; 2000WO-US0005014.
24 - FEB - 2000; 2000WO-US005841.
15 - MAR - 2000; 2000WO-US005841.
17 - MAY - 2000; 2000WO-US014941.
22 - MAY - 2000; 2000WO-US014941.
23 - AUG - 2000; 2000WO-US014941.
23 - AUG - 2000; 2000WO-US014941.
23 - AUG - 2000; 2000WO-US01564.
23 - AUG - 2000; 2000WO-US01564.
24 - AUG - 2000; 2000WO-US01567.
26 - NOV - 2000; 2000WO-US01567.
27 - NUN - 2000; 2000WO-US01666.
20 - JUN - 2001; 2001WO-US019692.
20 - JUN - 2001; 2001WO-US01196.
20 - JUL - 2001; 2001WO-US01196.
20 - JUL - 2001; 2001WO-US01196.
20 - JUL - 2001; 2001WO-US01196.
98US-0113296P.
98US-011423P.
99WS-01200106-
99US-0129674P.
99US-0141037P.
99US-014658P.
99WS-014568P.
99WS-0162504P.
99WS-0162504P.
99WS-0162506P.
99WS-0162506F.
99WS-0162506F.
99WS-0162506F.
99WS-0162506F.
99WS-0162506F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GICCIGGCICCAGIIGG 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        gracaggergeagrigg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADE13527 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-708395/67.
 22-DEC-1998;
30-DEC-1998;
05-JAN-1999;
16-APR-1999;
23-JUN-1999;
01-SEP-1999;
11-SEP-1999;
30-OCT-1999;
30-OCT-1999;
16-DEC-1999;
16-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADE13527;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             854
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADE13527
    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           XXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

SK

o;

```
98US-0099556P

98US-009956P

98US-0099642P

98US-0099642P

98US-0099744P

98US-0099744P

98US-0099744P

98US-0099712P

98US-0099812P

98US-0099812P

98US-010938P

98US-010038P

98US-010039P

98US-0100544P

98US-0100544P

98US-010064P

98US-010044P

98US-010044P

98US-010147P

98US-010147P
                                                                                                                                                                                                                                                                                                                                                                                                                                              9805-0101741P

9805-0101743P

9805-0101916P

9805-0102207P

9805-0102304P

9805-010231P

9805-010231P

9805-0102484P

9805-0102484P

9805-0102687P

9805-0102687P

9805-0102684P

9805-0102684P

9805-0102684P

9805-0102684P

9805-010268P

9805-0103818P

9805-0103318P

9805-0103318P

9805-0103318P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0103678P
98US-0103679P.
98US-0103711P.
98US-0104257P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0103401P.
98US-0103633P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0105000P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-OCT-1998;
07-OCT-1998;
07-OCT-1998;
08-OCT-1998;
                                      09-SEP-1998;
09-SEP-1998;
10-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                              23-SEP-1998;
23-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-0CT-1998;
06-0CT-1998;
06-0CT-1998;
07-0CT-1998;
                                                                                                                                      10-SEP-1998;
15-SEP-1998;
                                                                                                                                                                               16-SEP-1998;
16-SEP-1998;
                                                                                                                                                                                                              16-SEP-1998;
16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-SEP-1998;
                                                                                  10-SEP-1998;
10-SEP-1998;
                                                                                                        10-SEP-1998
                                                                                                                 10-SEP-1998;
                                                                                                                                                                                                     16-SEP-1998;
                                                                                                                                                                                                                                               17-SEP-1998
                                                                                                                                                                                                                                                                                                                                          18-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                             23-SEP-1998
23-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                  23-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                24-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-OCT-1998,
01-OCT-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-0CT-1998
07-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  14-OCT-1998
20-OCT-1998
                                                                                                                                                                                                                                                                                                                                                      22-SEP-1998
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, PCR, primer, secreted protein, transmembrane protein, PRO, tumour, immune response, cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing, diabetes; skeletal muscle cells; obesity; Berger disease, nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                                                                                                                                                The invention relates to a method of identifying a class I or II Human Leukocyte Antigen (HLA) genotype of a subject using hybridisation and amplification assay. The method is used for determining the HLA genotype of a subject. The present sequence represents a HLA class I allele specific primer.
                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                               Identifying class I or II Human Leukocyte Antigen genotypes using hybridization and amplification assays.
                                                                                                                                                                                                                                                                                                                                                                         0;
         ss; primer; PCR; human; Human Leukocyte Antigen; HLA; genotype.
                                                                                                                                                                                                                                                                                                                                                    4.2%; Score 12.2; DB 1; Length 18; 82.4%; Pred. No. 5.9e+02; ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human secreted/transmembrane protein PRO1480 PCR primer #3
                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 3 A; 7 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                               Claim 7; SEQ ID NO 145; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                              744 GIAGGICCCAGGGICC 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0098723P.
98US-0098749P.
98US-0098750P.
98US-0098803P.
98US-0098821P.
                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGGTCCCCAGGTCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADE20158 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-DEC-2001; 2001US-00013430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0098716P
                                                                                                                  20-DEC-1999; 99US-0172768P.
20-DEC-2000; 2000US-00747391.
                                                                                             25-APR-2002; 2002US-00133779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                               Local Similarity 82.4
nes 14; Conservative
                                                                                                                                                  (STEM-) STEMCYTE INC.
                                                                                                                                                                                          WPI; 2003-874916/81.
                                                                                                                                                                       Tonai R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003092883-A1
                                                     US2003165884-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
02-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAY-2003
                                                                          04-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADE20158;
                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                       Chow R,
                                                                                                                                                                                                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 584
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADE20158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
                                                                                                                                                                                                                                                                                                                                                                                                à
```

rng.res

```
980S-0105002P

980S-0105104P

980S-0105266P

980S-0105693P

980S-0105693P

980S-0105682P

980S-0106623P

980S-0106033P

980S-0106032P

980S-0106032P

980S-0106032P

980S-0106032P

980S-0106032P

980S-010603P

980S-0106032P

980S-010603P

980S-010603P

980S-010603P

980S-010603P

980S-010603P

980S-010603P

980S-010803P

980S-010803P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000WO-US014941.
2000WO-US015264..
2000WO-US023522.
2000WO-US023328.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000MO-US006884.
2000MO-US013705.
2000MO-US014042.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000WO-US030952.
2000WO-US030873.
2000WO-US032678.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000WO-US004342.
2000WO-US005004.
2000WO-US005841.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0162506P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000WO-US000219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000WO-US000376
2000WO-US003565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US028313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US028551
99WO-US030095
                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US021194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-JAN-2000;
11-FBB-2000;
18-FBB-2000;
02-MAR-2000;
115-MAR-2000;
17-MAY-2000;
17-MAY-2000;
32-MAY-2000;
20-OCT-1998;
22-OCT-1998;
22-OCT-1998;
22-OCT-1998;
26-OCT-1998;
27-OCT-1998;
27-OCT-1998;
27-OCT-1998;
28-OCT-1998;
28-OCT-1998;
28-OCT-1998;
28-OCT-1998;
28-OCT-1998;
29-OCT-1998;
30-OCT-1998;
30-OCT-1998;
30-OCT-1998;
30-OCT-1998;
                                                                                                                                                                                                   03-NOV-1998;
03-NOV-1998;
03-NOV-1998;
10-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                         26-JUL-1999;
01-SEP-1999;
15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOV-2000;
NOV-2000;
DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-DEC-1999;
16-DEC-1999;
                                                                                                                                                                                                                                                       17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                          18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                       05-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                16-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                       23-JUN-1999;
20-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                    18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                              18-NOV-1998;
                                                                                                                                                                                                                                               17-NOV-1998
                                                                                                                                                                                                                                                                                                17-NOV-1998
17-NOV-1998
                                                                                                                                                                                                                                                                                                                                            8-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                             18-NOV-1998;
                                                                                                                                                                                                                                                                               17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-OCT-1999
30-NOV-1999
                                                                                                                                                                                                                                                                                                                  17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                      22-DEC-1
30-DEC-1
```

```
, Fong S;
Hillan KJ;
, Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; PCR; primer, secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                                                                                                                                                                                                                     The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                 New isolated PRO polypeptide useful for tissue typing, modulating biological activity of cell, as molecular weight markers in protein
                                                                                                                                                           Gurney AL,
A, Tumas D,
                                                                                                                                                Eaton DL, Ferrara N,
                                                                                                                                                                                                                                                                                                                                                                               4.2%; Score 12.2; DB 1; Length 18; 32.4%; Pred. No. 5.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human secreted/transmembrane protein PRO1480 PCR primer #3
                                                                                                                                                                                                                                                                biological activity of cell, as molecular weight ma electrophoresis, for treating arthritis and tumors.
                                                                                                                                             Baker KP, Botstein D, Desnoyers L, Eaton DL, Fe
Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gui
Pan J, Paoni NE, Roy MA, Smith V, Stewart TA,
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                         Example 74; SEQ ID NO 256; 555pp; English.
28-FEB-2001; 2001WG-US006520.

01-MAR-2001; 2001WG-US00666.

01-UJN-2001; 2001WG-US017800.

20-UJN-2001; 2001WG-US019692.

29-UJN-2001; 2001WG-US021066.

09-UJL-2001; 2001WG-US021735.

04-SEP-2001; 2001US-00946374.
                                                                                                                                                                                                                                                                                                                                                                                                                                         870
                                                                                                                                                                                                                                                                                                                                                                                                                                                              17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0098716P.
98US-0098742P
98US-0098750P.
98US-009873P.
98US-0098843P.
98US-0098843P.
98US-0099843P.
98US-009959F.
98US-009959F.
98US-009959F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ВP
                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 82.4%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-DEC-2001; 2001US-00006116
                                                                                                                                                                                                                                                                                                                                                                                                                                                          || | || || || || || || || || || || || GTACAGGCTGCAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADE50069 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                         854 GTCCTGGCTCCAGTTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                   (GETH ) GENENTECH INC.
                                                                                                                                                                                                                      WPI; 2003-765493/72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2003082626-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADE50069;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \ddot{H}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADE50069
   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

 US-0099754P	US-0099763P	11S-0099/92F	US-0099812P	US-0099815P	3US-0099816P	SUS-0100388P	3US-0100390	3US-0100627P	3US-0100661P	3US-0100662P	3US-0100664P 3US-0100683P	3US-0100684P	3US-0100710P	3US-0100711P	3US-0100919F	3US-0100848P	3US-0100849P	3US-0101014P	3US-0101068F	3US-0101279P	3US-0101471P	3US-0101472P	3US-01014/4F	9US-0101476P	3US-0101477P	3US-0101479P	8US-0101741P	3US-0101743P	BUS-0101915P	8US-0101916P	8US-0102240P	BUS-0102307P	8US-0102330F	8US-0102331F 8US-0102484P	8US-0102487F	BUS-0102570F	8US-01025/1F 8US-0102684F	BUS-0102687F	BUS-0102965F	8US-0103449F	BUS-0103314F	8US-0103315F 8TS-0103328E	8US-0103395F	8US-0103396F	8US-0103401E 8US-0103633E	8US-0103678E	BUS-0103679E	8US-0103711E	8US-010425/E	8US-0105000F	8US-0105002F	8US-01051041 8IIS-01051691	8US-0105266	8US-0105693E	0105694E 0105807E	
-SEP-1998	)-SEP-1998	)-SEP-1998 )-SEP-1998	-SEF-1998 -SEP-1998	-SEP-1998	-SEP-1998	-SEP-1998	S-SEP-1998	-SEP-1998	5-SEP-1998	5-SEP-1998	7 - SEP - 1998	7-SEP-1998	7-SEP-1998	7-SEP-1998	/SEP-1998	3-SEP-1998	3-SEP-1998	3-SEP-1998	3-SEP-1998	2-SEP-1998	3-SEP-1998	3-SEP-1998	3 - SEP - 1998	3-SEP-1998	3-SEP-1998	3-SEP-1998	1-SEP-1998	1-SEP-1998	1-SEP-1998	1-SEP-1998	9-SEP-1998	9-SEP-1998	9-SEP-1998	9-SEP-1940	0-SEP-1998	0-SEP-1998	0-SEF-1998 1-OCT-1998	1-0CT-1998	2-OCT-1998	6-0CT-1998	7-OCT-1998	7-OCT-1996 7-OCT-1996	7-0CT-1996	7-0CT-1996	7-0CT-1998	8-OCT-1998	8-OCT-1998	8-0CT-1998	#-0CI-188	0-0CT-1998	0-0CT-1998	1-0CT-1998	2-0CT-1998	6-0CT-199	ยีย	120
PR	PR I	H. G	P.R.	PR	PR	PR	Ж. Е	PR PR	PR	PR t	¥ 5	PR.	PR	표 :	4 5 4 6	: E	PR	ደ ፡	7 G		PR	전 전 전	¥ 5	H.	PR	F 5	¥ K	PR	PR	묎	Z Z	PR	Ж. Е	, 보	PR	PR	P P	PR	A C	PR	PR	7. G	R. R.	PR	ች <b>ይ</b>	H. H.	PR	F. E	¥ 5	PR.	ሟ ር	¥ 8	P. P.	PR	ያዊ የ	:

UUS-0105881P UUS-0105882P UUS-0106023P UUS-0106023P UUS-0106030P UUS-0106030P UUS-0106030P UUS-0106030P UUS-0106030P UUS-0106030P UUS-0106030P UUS-0106030P	98US-0106856P. 98US-0106902P. 98US-0106902P. 98US-0106932P. 98US-0106733P. 98US-0108778P. 98US-0108778P. 98US-0108778P. 98US-0108778P. 98US-010878P. 98US-0108801P. 98US-0108801P. 98US-0108804P. 98US-0108801P. 98US-0108801P. 98US-0108801P. 98US-0108801P. 98US-0108801P.	98US-0108852P 98US-0108858P 98US-0108858P 98US-012226F 98US-012226F 99US-014223P 99US-012674P 99US-012674P 99US-014758P 99US-01659B 99US-016729P 99US-016729P 99US-016729P 99US-016729P 99US-016729P 99US-016729P 99US-016729P	0MO-US004345 0MO-US006342 0MO-US0050841 0MO-US013705 0MO-US013705 0MO-US01372 0MO-US02328 0MO-US02328 0MO-US023328 0MO-US023328 0MO-US0330873 0MO-US0306526 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO-US0306520 0MO
	03-NOV-1998 03-NOV-1998 03-NOV-1998 03-NOV-1998 03-NOV-1998 10-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 17-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NOV-1998 18-NO	3-NOV 1998 3-NOV 1998 3-NOV 1998 3-NOV 1998 3-DEC 1998 3-DEC 1998 3-DEC 1998 3-DEC 1999	1.FEB-200 4-FEB-200 4-FEB-200 5-AKR-200 5-AKR-200 2-MAY-200 0-MAY-200 3-AUG-200 3-AUG-200 4-AUG-200 6-NOV-200 0-NOV-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-200 1-DEC-
# # # # # # # # # # # # # # # # # # #	************************************	***************************************	X

ó

Gaps

.. 0

```
predisposition for or the occurrence of neurodegenerative disease in a subject. The method comprises detecting in a target nucleic acid obtained from the subject the presence or absence of an allelic variant of one or more polymorphic regions of one or more genes selected from upA (Urokinase plasminogen activator). SNGG (gamma-synuclein), IDE (insulindegrading enzyme), KNSII (Kinesin-like protein 1), LIPA (lysosomal acid lypase), and TNFRSFG (Tumour Mecrosis Factor Receptor-SFG), where the presence of at least one of the allelic variant of one or more polymorphic regions is indicative of a predisposition for or the chromosome 10. MI is useful for determining a predisposition for or the occurrence of, and for treating neurodegenerative disease. The genes are all located on chromosome of, and for treating neurodegenerative disease, particularly Allzheimer's disease. The present sequence is a PCR primer, which was used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing, diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                                                                                                                                       4.2%; Score 12.2; DB 1; Length 18; 32.4%; Pred. No. 5.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human secreted/transmembrane protein PRO1480 PCR primer #3.
                                                                                                                                                                                                                            Sequence 18 BP; 2 A; 6 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                   GIATGCTCCCAGTGTCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                    ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0098723P.
98US-0098749P.
98US-009803P.
98US-0098821P.
98US-0098843P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0099741P.
98US-0099754P.
98US-0099763P.
98US-0099792P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0099808P.
98US-0099812P.
98US-0099815P.
98US-01003885P.
98US-0100388P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0099602P.
98US-0099642P.
                                                                                                                                                                                                                                                                     82.48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0099596P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13-DEC-2001; 2001US-00017527
                                                                                                                                                                                                                                                                                                                                                                                                                  ADE21627 standard; DNA; 18
                                                                                                                                                                                                                                                                                                               744 GTAGGGTCCCAGGGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                   Local Similarity 82.4 les 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003082628-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
02-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-SEP-1998;
09-SEP-1998;
09-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                10-SEP-1998;
15-SEP-1998;
15-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-SEP-1998;
09-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                               ADE21627;
                                                                                                                                                                                                                                                                                                                                            Н
                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                       RESULT 587
                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                      ADE21627
       q
                                                                                                                                                                                                                                                                                                                                                                                                                                              , Fong S;
Hillan KJ;
, Watanabe CK;
                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Determining a predisposition for or the occurrence of neurodegenerative disease, e.g. Alzheimer's disease by detecting in a target nucleic acid the presence or absence of an allelic variant of one or more polymorphic regions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bertram L;
                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                    Novel isolated PRO polypeptides useful for tissue typing, modulating biological activity of cell, as molecular weight markers in protein electrophoresis, for treating arthritis and tumors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Neurodegenerative disease, uPA, SNCG; IDE; KNSL1; LIPA, TNFRSF6; Alzheimer's disease; neuroprotective; nootropic; gene therapy; Chromosome 10; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to a method (M1) for determining a
                                                                                                                                                                                                                                                                                                               .,
                                                                                                                   Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, 1 Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                 Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tanzi RE,
                                                                                                                                                                                                                                                                                                              3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wang X, Ta
                                                                                                                                                                                                                                                                                4.2%; Score 12.2; DB 1;
32.4%; Pred. No. 5.9e+02;
Ive 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human IDE sequencing primer, SEQ ID 184.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Elliott KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sampson AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 3; Page 277; 848pp; English.
                                                                                                                                                                                                                                                                                                                                        854 GICCIGGCICCAGIIGG 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; 2001US-0339525P.
; 2001US-0336929P.
; 2001US-0338010P.
; 2001US-0338363P.
; 2001US-0337052P.
                20-JUN-2001; 2001WO-US019692.
29-JUN-2001; 2001WO-US021066.
09-JUL-2001; 2001WO-US021735.
                                                                                                                                                                                                                                                                                                                                                                   1 Gracagerrecagried 17
   2001US-00882636
                                                           04-SEP-2001; 2001US-00946374
                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 82.4%;
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-OCT-2002; 2002WO-US034679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2002US-0368919P
                                                                                                                                                                                                                                                                                                                                                                                                                                         ADE43579 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 o,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GEN HOSPITAL CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NEUROGENETICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Becker KD, Velicelebi G,
Saunders AJ, Mullin KM,
                                                                                      (GETH ) GENENTECH INC.
                                                                                                                                                                                            WPI; 2003-765413/72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-559131/52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO2003054143-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-NOV-2001;
04-DEC-2001;
28-MAR-2002;
14-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-OCT-2001;
08-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-NOV-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           03-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADE43579;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GEHO)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (NEUR-)
                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 586
                                                                                                                                                                                                                                                                                                                                                                                                                           ADE43579
   ð
                                                                                                                                                                                                                                                                                                                                                                  g
```

```
98US-0100390P.
98US-0100584P.
98US-0100661P.
98US-0100661P.
98US-0100664P.
98US-0100664P.
98US-0100664P.
98US-0100684P.
98US-010019P.
98US-010011P.
98US-010011P.
98US-010011P.
98US-010011P.
98US-0101147P.
98US-0101147P.
98US-0101147P.
98US-0101147P.
98US-0101147P.
98US-0101147P.
98US-0101147P.
98US-0101147P.
98US-010130P.
98US-010130P.
98US-010130P.
98US-010131P.
98US-010131P.
98US-010131P.
98US-010131P.
98US-010131P.
98US-010131P.
98US-010131P.
98US-010131P.
98US-010131P.
98US-010363P.
98US-010662P.
98US-010662P.
98US-010662P.
98US-010663P.
98US-010663P.
98US-010663P.
  16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
18-SEP-1998;
23-SEP-1998;
23-SE
```

98US-0106248P.
98US-0106364P.
98US-0106464P.
98US-0106865P.
98US-0106902P.
98US-0106932P.
98US-0106332P.
98US-0106332P.
98US-0106332P.
98US-0106332P.
98US-0108779P.
98US-0108779P.
98US-0108779P.
98US-010878P.
98US-0108867P.
98US-0108867P. 99WO-US030095. 2000WO-US030316. 2000WO-US00376. 2000WO-US003565. 2000WO-US004342. 2000WO-US005841 2000WO-US006884 2000WO-US0134045 2000WO-US014941 2000WO-US015264 2000WO-US015264 2000WO-US023328 2000WO-US0336873 2000WO-US030873 2000WO-US030873 2000WO-US030873 2000WO-US030873 2000WO-US030873 2000WO-US030873 SU-OW66 29-OCT-1998;
29-OCT-1998;
29-OCT-1998;
30-OCT-1998;
30-OCT-1998;
31-OCT-1998;
33-OCT-1998;
34-OCT-1998;
35-OCT-1998;
36-JUL-1999;
37-OCT-1998;
38-DEC-1998;
38-DEC-1998;
38-DEC-1998;
38-DEC-1998;
38-DEC-1998;
38-DEC-1998;
38-DEC-1998;
38-DEC-1999;
38-JUN-2000;
38-MAX-2000;
38-MA 

(GETH ) GENENTECH INC

CK; Fong S; Hillan KJ; Watanabe C Ferrara N, Gurney AL, H A, Tumas D, TA, Baker KP, Botstein D, Desnoyers L, Eaton DL, Gao W, Goddard A, Godowski PJ, Grimaldi JC, GPan J, Paoni NF, Roy MA, Smith V, Stewart TA, Williams PM, Wood WI;

WPI; 2003-755105/71

..

.. 0

Gaps

ö

Length 18;

Score 12.2; DB 1; Length 1 Pred. No. 5.9e+02; 0; Mismatches 3; Indels

4.2%; 82.4%;

or identity

ö

```
The oligomer is designed to target the Human hepatitis B virus beginning at nucleotide 2605 and to covalently cross-link to it. See also AAQ20110-Q20117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New sequence-specific non-photo-activated crosslinking agents - bind to the major groove of duplex DNA and are esp. useful for treating latent infections e.g. HIV.
            Novel secreted and transmembrane PRO polypeptides useful for treating cancers, kidney disorders, Crohn's disease, diabetes mellitus, hyperhypo-insulinemia, sports injuries and arthritis.
                                                                                                                                                                                                                                                                                                                             Cross-linking oligomer 112 for targetting Human hepatitis B virus.
                                                                                 The invention relates to an isolated PRO polypeptide (secreted transmembrane protein) having at least 80% amino acid sequence
                                                                                                                                                                                                                                                                                                                                                     deoxyribonucleic acid; major groove; ethanoamino group; HBV; aziridinylcytosine; cross-linking group; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 note = "N4N4-ethanocytosine"
                                                         Example 74; SEQ ID NO 256; 548pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 4; Page 27; 42pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= a
/mod_base= OTHER
                                                                                                                                                                      854 GTCCTGGCTCCAGTTGG 870
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= b
/mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= c
/mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= d
/mod_base= m5c
                                                                                                                                                                                             1 Gracagericcaeries 17
                                                                                                                                                                                                                                                       AAQ20115 standard; DNA; 12 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          90US-00529346.
91US-00640654.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  90US-00529346
                                                                                                                   Query Match
Best Local Similarity 82.4°
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GILE-) GILEAD SCIE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Krawczyk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1992-007480/01.
                                                                                                                                                                                                                                                                                                                                                                                                                              modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matteucci MD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified_base
                                                                                                                                                                                                                                                                                                       01-APR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAY-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAY-1990;
14-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9118997-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-DEC-1991
                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                 AAQ20115;
                                                                                                                                                                                                                                RESULT 588
                                                                                                                                                                                                                                             AAQ20115
ð
                                                                                                                                                                                           ď
```

s;

```
The synthetic oligomer is capable of forming a triplex at physiological pH with a purine rich target sequence by coupling into the major groove of the duplex. The specific target sequence of this oligomer is an HBV target duplex beginning at nucleotide 2605 contg. a purine-rich region
                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New oligomers contg. modified bases - which form a triplex with G-C doublet in a DNA duplex, for treating and diagnosing HIV, hepatitis, herpes malignancy and inflammation.
                                                                                                                                                                                                                                                     Human hepatitis B virus; AIDS; modified; HIV; herpes; malignancy;
                                                        ;
                                                                                                                                                                                                                                 Oligomer HBV112 for forming triplex with HBV target duplex.
                              4.1%; Score 12; DB 1; Length 12;
llarity 100.0%; Pred. No. 3.8e+02;
Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                          note= "OTHER= N4 N4 ethanocytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Milligan J;
         Sequence 12 BP; 0 A; 4 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matteucci MD,
                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                               OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 12; Page 66; 77pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                J= d
base= m5c
                                                                                                                                                    AAQ30265 standard; DNA; 12 BP.
                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= c
/mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                                                           /mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        91US-00643382.
91US-00683420.
91US-0068544.
91US-00686547.
91US-00686547.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91WO-US008811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                90US-00617907
                                                                                                                                                                                                (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                               base=
                                                                           831 CICITITICITCE 842
                                                                                                                                                                                                                                                                                                                                      ø
                                                                                               1 Crcirririri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Krawczyk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                /*tag=
/mod_bag
                                                                                                                                                                                                                                                                                                                                    /*tag=
                                                                                                                                                                                                                                                                                                                                                                                 *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (GILE-) GILEAD SCI INC.
                                                                                                                                                                                                                                                                                                                                                /mod
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1992-217083/26.
                                        Local Similarity
les 12; Conserv
                                                                                                                                                                                                                                                                   inflammation; ss.
                                                                                                                                                                                                                                                                                                              Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                   modified base
                                                                                                                                                                                                                                                                                                                                                                                                    modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                   modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-JAN-1991;
08-APR-1991;
17-APR-1991;
17-APR-1991;
17-APR-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9209705-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-NOV-1991;
                                                                                                                                                                                                25-MAR-2003
                                                                                                                                                                                                            07-DEC-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-SEP-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Froehler B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-JUN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-NOV-1990
                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                           AAQ30265;
                              Query Match
                                                                                                                                RESULT 589
                                                    Matches
2 X
                                                                           ò
                                                                                              qq
```

```
are useful in diagnosis and therapy of diseases characterised by specific DNA duplex targets, e.g. HIV, hepatitis, herpes, malignant tumours and inflammation. The triple helices form under mild conditions thus assays may be carried out without subjecting the test specimen to harsh conditions. Additional modifications, such as altered internucleotide linkages may also be incorporated, rendering the oligomer e.g. stable to nuclease activity. The oligomer is able to inhibit gene expression, as verified by in vitro systems. See also AAQ25452-25501 and AAQ30226-448. (Updated on 25-MAR-2003 to correct PN field.)
concentrated on one chain of the duplex. The oligomer, and others like it
```

8X3333333X8

Sequence 12 BP; 0 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

Score 12; DB 1; Length 12; Pred. No. 3.8e+02; 0; Indels Mismatches 4.1%; Scc. 100.0%; Pred 0; M 831 CTCTTTTCTTCT 842 12; Conservative Query Match Best Local Similarity Matches à g

CICITITICITCI 12

AAT35028 standard; DNA; 12 BP RESULT 590 AAT35028/0 

AAT35028;

Triplex-forming oligonucleotide targetting HBV P-gene.

(first entry)

18-FEB-1997

HBV; oligodeoxyribonucleotide; homopurine-homopyrimidine target; block; in vitro; DNA synthesis; DNA polymerase; Sequenase3; Taq; Vent; Pol I; accessory replication protein; SSB protein; sequence-specific; triplex-forming oligonucleotide; exon 3; inverted repeat; IR110; hepatitis B virus; P gene; ss.

Synthetic.

WO9618732-A2

20-JUN-1996.

95WO-US016368. 14-DEC-1995; 94US-00358089. 15-DEC-1994;

(UNII ) UNIV ILLINOIS FOUND.

Samadashwily GM; Mirkin SM,

WPI; 1996-300649/30.

Sequence specific inhibition of DNA synthesis - by triplex-forming oligo:nucleotide(s), for detection of oncogene mutation(s) and treatment of e.g. HSV, Hepatitis C and Papillomavirus infection.

Claim 18; Page 57; 78pp; English

Specifically designed oligodeoxyribonuclectides form triplexes in single-or double-strand DNA at homopurine-homopyrimidine targets. These triplexes block in vitro DNA synthesis by all DNA polymerases studied, including Sequenase3, Tag, Vent, and Pol I. A similar phenomenon occurs when DNA polymerases are supplemented with accessory replication proteins, including SSB protein. Replication blockage is highly sequence-sequence or the oligonucleotide abolish the effect. Sequence-specific blocking of DNA replication in vivo is facilitated by the methods at compositions of the present invention. The present sequence is a triplex-forming oligonucleotide which targets the P gene (position 2670-2681) of hepatitis B virus

```
0
                                                 Gaps
                                                 .
                        Length 12;
                                                 Indels
G; 0 T; 0 U; 0 Other;
                     4.1%; Score 12; DB 1; De 100.0%; Pred. No. 3.8e+02; Live 0; Mismatches 0;
Sequence 12 BP; 8 A; 0 C; 4
                                                                        842
                  Query Match
Best Local Similarity 100.
Matches 12; Conservative
                                                                       831 CTCTTTTCTTCT
                                                                                               CICITITICITCI
                                                                                               12
                                                                       à
                                                                                            g
```

RESULT 591 AAX14761

AAX14761 standard; DNA; 12

AAX14761; 

0

Gaps .. 0

(first entry) 24-MAR-1999 Triple helix third strand of Hepatitis B virus nucleotides 561-572.

Triplex formation; DNA detection; triple helix; identification; bacteria; oncogene; virus; ss.

Synthetic. Hepatitis B virus.

US5861244-A.

19-JAN-1999

93US-00173489. 22-DEC-1993;

92US-00968436. 29-0CT-1992;

(PROF-) PROFILE DIAGNOSTIC SCI INC.

Wang C; Hepburn AG, WPI; 1999-130384/11.

Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify bacteria.

Disclosure; Col 19-20; 168pp; English.

where it can be part of the anchor DNA or reporter DNA sequence. The assay comprises adding a sample containing double-stranded DNA test sequences to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA is designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of The present sequence represents a polynucleotide that is able to form a triple halix with a double stranded sequence. Cytosine bases in the present can be replaced with 5-methylcytosine for increased triplex stability. The present sequence is used in the assay of the invention, oncogenes and Hepatitis B virus

Sequence 12 BP; 0 A; 4 C; 0 G; 8 T; 0 U; 0 Other;

Gaps . 0 4.1%; Score 12; DB 1; Length 12; 100.0%; Pred. No. 3.8e+02; ive 0; Mismatches 0; Indels Query Match
Best Local Similarity 100...
Thes 12; Conservative

. 0

831 CTCTTTTCTTCT 842

qq à

```
929 CACCCTCCAGAG 940
                                                                                                                                                                                                                                Krupp G, Marget M,
                                                                                                                                                                                                                                                      WPI; 1997-132628/12.
                                                                                                                                                                                    MARGET M.
                                                                                                                                                                        (KRUP/) KRUPP G.
                                                                               WO9704087-A1.
                                                                                                                                                   18-JUL-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
14-JUL-1998
                                                                                                      06-FEB-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV10927;
                                                                                                                                                                                      MARG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV10927
à
                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·
0
                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                  Oligonucleotide primer SEQ ID NO 334290 for detecting SNP TSC0038060.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, i
designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .
0
                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 334290; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 12; DB 1; Length 12;
Pred. No. 3.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human ribozyme target sequence from HLA-B exon 3 #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Seguence 12 BP; 4 A; 7 C; 0 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 4.1%; ..... Best Local Similarity 100.0%; Pred. No. 3.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV10963 standard; RNA; 13 BP.
                                               ABI34317 standard; DNA; 12 BP.
                                                                                                                                                                                                                                                          06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                 07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                            22-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       921 ATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 ATCACCACCACC 12
                                                                                                                                                                                                                                                                                                                              Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                       (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                   methylation status.
                                                                                                                                                                                                             WO200177384-A2
                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                   18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAV10963;
                                                                     ABI34317;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV10963
ID AAV1
XX AC AAV1
XX DT 25-M
DT 14-J
XX DE HUMB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                      q
```

```
ANALOGIST-VILLES are Larget Sequences to a now the transformer and a hybridisation region which is ribozyme contains a catalytic region and a hybridisation region which is ribozyme contains a catalytic region and a hybridisation region which is complementary to all mRNA transcribed from vertebrate genes of a specific family of closely related MHC alleles or to mRNA from a single MHC allele, and is able to cleave such mRNA. The mRNA has a target region which in case is essentially conserved in all genes of the family but differs from genes of all other MHC alleles to such a degree that no cleavage of mRNA transcribed from these other alleles occurs. This allows the selective reduction or inhibition of expression of all genes of a family or of a single gene. This ribozyme can be used for permanent or translent suppression of expression of MHC alleles, in vivo or in vitro. Specific applications are to prevent guest vs. host or host vs. guest reactions, to prevent blood incompatibilities (partic. of the ABO, rhesus and rheumatoid arthritis. The use of this ribozyme avoids the need for immunosuppressants in transplant patients. It provides very specific reduction of particular HHA molecules that cause incompatibility specific reduction of particular HHA molecules that cause incompatibility between donor and recipient. (Updated on 25-MH2-2003) to correct PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV10915-V11123 are target sequences for a novel ribozyme which cleaves
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ribozyme that cleaves specific MHC allele(s) - used to inhibit graft versus host reactions, to overcome blood incompatibility and to treat auto:immune disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
Ribozyme; target; human lymphocyte antigen; HLA-B; MHC allele; major histocompatability complex; cleavage; suppression; transplant; incompatibility; autoimmune disease; juvenile diabetes; rheumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 12; DB 1; Length 13;
11.7%; Pred. No. 4.2e+02;
ve 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mueller-Ruchholtz W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                between donor and recipient. (Updated on 25-MAR-2003 (
field.) (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human ribozyme target sequence from HLA-A exon 3 #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 13 BP; 3 A; 6 C; 3 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Westphal E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 5; Fig 1; 76pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96WO-EP003173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95EP-00111256.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (WEST/) WESTPHAL E. (MUEL/) MUELLER-RUCHHOLTZ W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV10927 standard; RNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 91...
Rest Local Similarity 91...
```

. 0

```
AAV10915-V11123 are target sequences for a novel ribozyme which cleaves specific alleles from the major histocompatability complex (MHC). This stribozyme contablans a catalytic region and a hybridisation region which is complementary to all mRNA transcribed from vertebrate genes of a specific family of closely related MHC alleles or to mRNA from a single MHC alleles or to mRNA from a single MHC which in case is essentially conserved in all genes of the family but differs from genes of all other MHC alleles to such a degree that no cleavage of mRNA transcribed from these other alleles occurs. This allows the selective reduction or inhibition of expression of all genes of a family or of a single gene. This ribozyme can be used for permanent or transient suppression of expression of MHC alleles, in vivo or in vitro. Specific applications are to prevent guest vs. host or host vs. guest reactions, to prevent blood incompatibilities (partic. of the ABO, rhesus and Kell systems) and to treat autolimmune diseases such as juvenile and fire themmatorial arther interval and for interval and interval and for interval and f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       need for immunosuppressants in transplant patients. It provides very specific reduction of particular HLA molecules that cause incompatibility between donor and recipient. (Updated on 25-MAR-2003 to correct PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ribozyme that cleaves specific MHC allele(s) - used to inhibit graft versus host reactions, to overcome blood incompatibility and to treat auto:immune disease.
Ribozyme; target; human lymphocyte antigen; HLA-A; MHC allele; major histocompatablity complex; cleavage; suppression; transplant; incompatibility; autoimmune disease; juvenile diabetes; rheumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Triple-helix forming region; Triplex formation; DNA detection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Triple helix forming nucleotides 444-456 of 238 rRNA gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 12; DB 1; Length 13;
Pred. No. 4.2e+02;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   field.) (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mueller-Ruchholtz
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence i3 BP; 4 A; 6 C; 2 G; 0 T; 1 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Westphal E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                               96WO-EP003173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 5; Fig 1; 76pp; German.
                                                                                                                                                                                                                                                                                                                                  95EP-00111256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.18;
91.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                           MUELLER-RUCHHOLTZ W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX14884 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         929 CACCCTCCAGAG 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACCCUCCAGAG 13
                                                                                                                                                                                                                                                                                                                                                                              KRUPP G.
MARGET M.
WESTPHAL E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Krupp G, Marget M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1997-132628/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                                                 KRUP/) KRUPP
                                                                                                                                                                           WO9704087-A1
                                                                                                                                                                                                                                                                             18-JUL-1996;
                                                                                                                                                                                                                                                                                                                               18-JUL-1995;
                                                                                                                                                                                                                             06-FEB-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX14884;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MUEL/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                         (MARG/)
                                                                                                                                                                                                                                                                                                                                                                                                                                   (MEST/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
```

. 0

Gaps

. 0

```
The present sequence represents a potential triple-helix forming region. It can be used to demonstrate the assay of the invention. The assay comprises adding a sample containing double-stranded DNA teet sequences, e.g. containing the present sequence, to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA designed to form a triple-strand structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. The method is used to detect DNA sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detection of oncogenes and Hepatitis B virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                              Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide SEQ ID NO 119494 for detecting SNP TSC0029833.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 12; DB 1; Length 13; 100.0%; Pred. No. 4.2e+02; ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
identification; bacteria; oncogene; virus; ds.
                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Col 23-24; 168pp; English.
                                                                                                                                                                                               (PROF-) PROFILE DIAGNOSTIC SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABF19497 standard; DNA; 13 BP.
                                                                                                                                93US-00173489.
                                                                                                                                                                92US-00968436.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       833 CTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12 CTTTTCTTCTCT 1
                             Alcaligenes faecalis.
                                                                                                                                                                                                                                   Wang C;
                                                                                                                                                                                                                                                                 WPI; 1999-130384/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200177384-A2
                                                                                                                              22-DEC-1993;
                                                                                                                                                                 29-OCT-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                            US5861244-A
                                                                                               19-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-FEB-2002
                                                                                                                                                                                                                                  Hepburn AG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                    bacteria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABF19497;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

; 0

Mon Jul 12 11:21:14 2004

Berlin K;

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central invervous system, cardiovascular and metabolic disorders. Phecoligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABT00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at
                                                                                                                                 Set of oligonucleotides, useful for diagnosis and cell typing, : designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                            Claim 1; SEQ ID NO 119494; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13 BP; 0 A; 4 C; 0 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences
                                             Olek A, Piepenbrock C,
(EPIG-) EPIGENOMICS AG.
                                                                                          WPI; 2001-657177/75
                                                                                                                                                                                     methylation status.
    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               a
```

```
Query Match
4.1%; Score 12; DB 1; Length 13;
Best Local Similarity 100.0%; Pred. No. 4.2e+02;
Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                            833 CTTTTCTTCT 844
                                                                                                                                                                                                         1 crriricircici 12
```

0

Gaps

0;

ABF19496 standard; DNA; 13 BP (first entry) 21-FEB-2002 ABF19496; RESULT 597 ABF19496, 

Oligonucleotide SEQ ID NO 119493 for detecting SNP TSC0029833.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; Piepenbrock C, olek A,

WPI; 2001-657177/75

designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 119493; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic

acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABH00010-ABH99989 and ABI0010-ABIS2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at ·; Gaps 0; Score 12; DB 1; Length 13; Pred. No. 4.2e+02; 0; Indels Sequence 13 BP; 9 A; 0 C; 4 G; 0 T; 0 U; 0 Other; 4.1%; Scor. 100.0%; Pred. No. -... 0; Mismatches Query Match
Best Local Similarity 100.
Matches 12; Conservative 833 CTTTTCTTCT 844 888888888888888

ABC41592 standard; DNA; 13 BP. (first entry) CTITICITCICI 21-FEB-2002 ABC41592; 13 RESULT 598 ABC41592 g

ð

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 41609 for detecting SNP TSC0012485.

Homo sapiens.

WO200177384-A2. 18-OCT-2001. 06-APR-2001; 2001WO-IB000713.

2000DE-01019173. 07-APR-2000;

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

designed to detect single-nucleotide polymorphisms and cytosine Set of oligonucleotides, useful for diagnosis and cell typing, methylation status.

Claim 1; SEQ ID NO 41609; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF0010-ABF9989, ABH0010-ABH9989 and ABI0010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;

ö

rng.res

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010+ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic form part of the printed specification, but
                                                                                                                                                                                                                                                                                                                                                            SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, i
designed to detect single-nucleotide polymorphisms and cytosine
                                                          .;
                                                                                                                                                                                                                                                                                                                            Oligonucleotide SEQ ID NO 154661 for detecting SNP TSC0039103.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 154661; 29pp + Sequence Listing; German.
                          . 4.2e+02;
.... 0; Indels
                        Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 4.1%; Score 12; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 4.2e+02; Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13 BP; 5 A; 0 C; 5 G; 3 T; 0 U; 0 Other;
                  4.1%; Score 12; DB 1;
100.0%; Pred. No. 4.2e+0:
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Berlin K;
                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-APR-2000; 2000DE-01019173
Query Match
Best Local Similarity 100.v.
"Thes 12; Conservative
                                                                                                                                                                                                                     ABF54664 standard; DNA; 13
                                                                                                                                                                                                                                                                                        21-FEB-2002 (first entry)
                                                                                           926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides,
                                                                                                                           12 ATTATCATCACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (EPIG-) EPIGENOMICS AG
                                                                                         915 ATTATCATCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-OCT-2001
                                                                                                                                                                                                                                                         ABF54664;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   olek A,
                                                                                                                                                                                   RESULT 599
                                                                                                                                                                                                    ABF54664/c
                                                                                           à
                                                                                                                         g
```

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABC0010-ABC9989, ABC0010-ABC998
                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                      Oligonucleotide SEQ ID NO 154662 for detecting SNP TSC0039103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 23653 for detecting SNP TSC0005171.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 154662; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity 100.0%; Pred. No. 4.2e+02;
Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 13 BP; 3 A; 5 C; 0 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1636/c
ABC23636 standard; DNA; 13
                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   968 CICICIAAAICI 979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2 CTCTCTAAATCT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                WO200177384-A2
                                                                                                                                                                                                                                                                                                               sapiens
                                                                                 21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                        18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12;
                          ABF54665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABC23636;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                               Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABC23636,
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ਨੇ
```

. 0

0

Gaps

; 0

ABF54665 standard; DNA; 13 BP.

RESULT 600

ABF54665 ID ABF5

968 CICICIAAAICE 979

à

12

```
RESULT 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABH11914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABF00010-ABF99899 ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                          Set of oligonucleotides, useful for diagnosis and cell typing, is
                                                                                                                                                                                                                                                                                                                            designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 41610 for detecting SNP TSC0012485.
                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 23653; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13 BP; 1 A; 0 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 12; DB 1; Le
100.0%; Pred. No. 4.2e+02;
rative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Piepenbrock C, Berlin K;
                                                                                                                                                                                                                     Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABC41593 standard; DNA; 13 BP.
                                                                                       06-APR-2001; 2001WO-IB000713.
                                                                                                                                  07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 100.
Watches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              920 CATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CATCACCACCAC 2
                                                                                                                                                                                                                     Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (EPIG-) EPIGENOMICS AG
                                                                                                                                                                            (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                              WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                     methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200177384-A2.
WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-OCT-2001.
                                           18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABC41593;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABC41593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HANDER STANDER STANDER
  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       엄
```

```
1.5
Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
```

SEQ ID NO 41610; 29pp + Sequence Listing; German.

This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, ardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;

Gaps . 0 4.1%; Score 12; DB 1; Length 13; 0; Indels 4.2e+02; Query Match
Best Local Similarity 100.0%; Pred. No. ...
Matches 12; Conservative 0; Mismatches

o;

ABH11914 standard; DNA; 13 BP.

ABH11914;

(first entry) 22-FEB-2002

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 211891 for detecting SNP TSC0005186.

Homo sapiens.

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG.

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 211891; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

WPI; 2001-657177/75.

```
RESULT 606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                   ABH11915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX75731
                           g
                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ઠે
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABH99999, and ABI00010-ABI32073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF0010-ABF99989, ABF0010-ABF99989, ABF0010-ABF99989 and ABI00010-ABF182073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide SEQ ID NO 23654 for detecting SNP TSC0005171.
                                                                                                                       4.1%; Score 12; DB 1; Length 13; 100.0%; Pred. No. 4.2e+02; ative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 23654; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 4.1%; Score 12; DB 1; Length 13; Best Local Similarity 100.0%; Pred. No. 4.2e+02; Matches 12; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 13 BP; 5 A; 7 C; 0 G; 1 T; 0 U; 0 Other;
                                                                                             Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other;
                                                                   ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                          ABC23637 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                              967 ACTCTCTAAATC 978
                                                                                                                                                  12; Conservative
                                                                                                                                                                                              ACTCTCTAAATC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EPIG-) EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-657177/75.
                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                  20-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-OCT-2001
                                                                                                                                                                                                                                                                                                       ABC23637;
                                                                                                                        Query Match
                                                                                                                                                                                                        13
                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                RESULT 604
                                                                                                                                                                                                                                                               ABC23637
88888888888
                                                                                                                                                                                                                                                                            à
```

·:

Gaps

.

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretraeted genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABF99999, ABH00010-ABH99999 and ABI00010-ABF3073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
                                                                                                                                                                                                                                                                                                                                                                                                  Oligonucleotide SEQ ID NO 211892 for detecting SNP TSC0005186.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 211892; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 12; DB 1; Length 13; 100.0%; Pred. No. 4.2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%; Pred. No. 4.2 tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ¥
                                                                                                                                                                                                                 ABH11915 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX75731 standard; RNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-JUL-1999 (first entry)
920 CATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 967 ACTCTCTAAATC 978
                                      1 CATCACCACCAC 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 ACTCTCTAAATC 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              methylation status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                         22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-OCT-2001.
                                                                                                                                                                                                                                                                                ABH11915;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX75731;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AXXXXXXXXXXX
```

```
Bentivegna SC,
                                                                                    18-SEP-1998;
25-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                      26-APR-1999;
                                                                  27-APR-1998;
                                                                                                                               23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-NOV-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-JUL-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABS51918;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABS51918/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour anglogenesis, coular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic and molecule or the expression vector to the patient. AAX67575 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                      Vascular endothelial growth factor receptor; VBCF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; Cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           or mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Enzymatic nucleic acid; hammerhead ribozyme; virus replication; cleavage;
cirrhosis; liver failure; hepatocellular carcinoma; interferon; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acid molecule modulating VEGF receptor(s) gene expression or stability - useful for treating e.g. tumour anglogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 6326.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 12; DB 1; Length 15; 75.0%; Pred. No. 5.18+02; ive 3; Mismatches 0; Indels
Human flt-1 and KDR hammerhead ribozyme target site #65.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 1 A; 6 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 9; Page 191; 218pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ64218 standard; RNA; 15 BP
                                                                                                                                                                                                                                                                                                            96WO-US017480
                                                                                                                                                                                                                                                                                                                                                     95US-0005974P
                                                                                                                                                                                                                                                                                                                                                                          96US-00584040.
                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                800 GAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGCUCUCCUCC 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      autoimmune disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                         CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
les 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hepatitis C virus.
                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                      WO9715662-A2
                                                                                                                                                                                                                                                                                                            25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                   26-OCT-1995;
11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W09955847-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-NOV-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ64218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                       (CHIR )
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAZ64218
    SO COCOCOCO COCO COCOCO COCOCOCO COCOCO COCOCOCO COCOCO CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

```
Human; flavin containing monooxygenase-2; FMO2; isogene; drugs targeting; drug toxicity; bone disorder; gene therapy; polymorphism; chromosome lq; allele-specific oligonucleotide; ASO; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             enzymatic mucleic acid, respecially a hammerhead ribozyme, which cleaves the Hepatitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and hepatocellular carcinoma. The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune
                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present sequence represents the preferred target sequence of an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Parks KE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 12; DB 1; Length 15; 75.0%; Pred. No. 5.18+02; ive 3; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                 Macejak
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Messer C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human FMO2 gene polymorphism detection ASO primer #39.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 2 A; 7 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                 Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lee HH,
                                                                                                                                                                                                                                                                                                                 Blatt L, Mcswiggen JA, Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Duda A, Kazemi A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 85; 123pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-DEC-2001; 2001WO-US049059.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-DEC-2000; 2000US-0259062P.
                                                                  98US-0083217P.
                                                                                                   98US-0100842P.
99WO-US009027
                                                                                                                                                                         99US-00274553
                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABS51918 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           856 CCTGGCTCCAGT 867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ||:|||:|||:
ccuggcuccAgu 12
                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-062023/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
les 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200253579-A2
```

0;

condidate target for treating a specific condition or disease predicted to be associated with FMO2 activity, e.g. drug toxicity, and in the design of clinical trials for treating a specific condition of disease associated with FMO2 activity. e.g. drug toxicity, and in the design of clinical trials for treating a specific condition of disease associated with FMO2 activity. The methods are also useful for screening FMO2. The mucleic acid of the invention is useful in studying the expression and function of FMO2, and in expressing FMO2 protein for use in screening for candidate drugs to treat diseases related to FMO2 activity. It is also useful in studying the effect of the variation on the biological activity of FMO2 swell as on the binding affinity of candidate drugs targeting FMO2 for the treatment of drug toxicity. The invention is useful for studying the expression of FMO2 isogenes in vivo, for in vivo screening and testing of drugs targeted against FMO2 protein, and for testing the efficacy of therapeutic agents and compounds for treating drug toxicity in a biological system. The objection of sequence represents an allele-specific consideration of the methods of the content of drugs that the was used in the methods of the content of a primer that was used in the methods of the content of The present invention relates to a new polynucleotide which comprises thavin contraining monoxygenase-2 (FMO2) isogenes. The invention is useful in screening for drugs that are useful for treating drug toxicity. The methods of the invention are useful for improving the efficiency and reliability of several steps in the discovery and development of drugs for treating diseases associated with FMO2 activity. The methods are also used by the pharmaceutical research scientist to validate FMO2 as a Novel genetic variants of Flavin Containing Monooxygenase 2 isogenes, useful for improving efficiency and reliability in drug development for treating developmental bone disorders. Claim 15; Page 16; 140pp; English WPI; 2002-590627/63. 

; 0 Score 12; DB 1; Length 15; Pred. No. 5.1e+02; 1; Indels Sequence 15 BP; 3 A; 6 C; 3 G; 2 T; 0 U; 1 Other; Mismatches 4.1%; Best Local Similarity 85.7 Matches 12; Conservative chromosome 1q Query Match

TTCTGAGGGCAGCC 786 Yrcreaegecaege 1 773 14 à d

ABK36997 standard; DNA; 15 08-MAY-2002 (first entry) ABK36997; RESULT 609 

BP.

Human ALAS2 gene allele-specific oligonucleotide sequencing primer #22.

Human; aminolevulinate delta synthase 2; ALAS2; haplotyping; primer; ss; haplotype pair; single nucleotide polymorphism; genotyping; antianaemic; gene therapy; drug screening; X-linked sideroblastic anaemia; sequencing; hypochromic anaemia; probe; PCR.

Homo sapiens

WO200210454-A2

07-FEB-2002

30-JUL-2001; 2001WO-US023914.

28-JUL-2000; 2000US-0221827P.

(GENA-) GENAISSANCE PHARM INC.

Stephens JC; Kliem S, Koshy B, Choi JY,

WPI; 2002-188755/24.

New isolated human aminolevulinate delta synthase 2 polynucleotide, useful for therapeutic purposes, for studying the expression and function of the polynucleotide, and for expressing the aminolevulinate protein.

Claim 16; Page 13; 90pp; English.

Les givestication of microst course, as a section by a mapping pair. This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype pair of the ALAS2 gene can be identified by comparing the frequency of the haplotype or haplotype pair in a reference population, where a higher haplotype frequency in the trait population indicates the trait is associated with the haplotype or haplotype pair. ALAS2 and its corresponding DNA are used for studying the expression and function of ALAS2, for use in screening for candidate drugs to treat diseases related to ALAS2 activity, such as X-linked sideroblastic anaemia and hypochromic anaemia. The sequences are also useful for studying the effect of variation on the biological activity of ALAS2 as such as the used as a such a The invention relates to single nucleotide polymorphisms in the gene encoding human aminolevulinate delta synthase 2 (ALAS2). A method for haplotyping the ALAS2 gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the ALAS2 haplotypes given in the specification or whether both copies are defined by a haplotype oligonucleotide probes, sequencing primers and PCR primers used to detect ALAS2 gene polymorphisms 

Sequence 15 BP; 2 A; 6 C; 6 G; 0 T; 0 U; 1 Other;

Gaps .. Score 12; DB 1; Length 15; Pred. No. 5.1e+02; 1; Indels 1; Mismatches 4.1%; Matches 12; Conservative Query Match Best Local Similarity

ó

779 GGGCAGCCCCTCTG 792 GGGCAGCCCCACYG 15 ò g

.

Gaps

610 ABK81350, RESULT

ABK81350 standard; DNA; 15 BP.

ABK81350;

Human FOS gene allele-specific oligonucleotide sequencing primer #13 (first entry) 13-AUG-2002 

Human; v-fos FBJ murine osteosarcoma viral oncogene homologue; FOS; cytostatic; gene therapy; single nucleotide polymorphism; haplotyping; haplotype pair; developmental bone disorder; cancer; tumour; ss; primer; chromosome 14q21-q31; sequencing.

Homo sapiens

WO200232931-A2

25-APR-2002.

19-OCT-2001; 2001WO-US046142.

19-OCT-2000; 2000US-0241620P.

(GENA-) GENAISSANCE PHARM INC.

Lee HH; Koshy B, Anastasio AE, Kliem SE,

WPI; 2002-435529/46.

Homolog (FOS) isogenes, useful for improving efficiency and reliability in drug development for treating developmental bone disorders. Novel genetic variants of V-Fos FBJ Murine Osteosarcoma Viral Oncogene

Claim 15; Page 14; 73pp; English.

The invention relates to single nucleotide polymorphisms in the gene encoding the human v-fos FBJ murine osteosarcoma viral oncogene homologue (POS) polypeptide. A method for haplotyping the FOS gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the FOS haplotypes given in the specification or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair of the FOS gene can be identified by comparing the frequency of the haplotype or haplotype or haplotype pair in a reference population, where a higher haplotype or haplotype or haplotype pair. FOS and its corresponding DNA are used for studying the expression and function of FOS, for use in screening for candidate drugs to treat diseases related to FOS, for use in screening for candidate drugs to treat diseases related to FOS, for use also useful for studying the effect of variation on the biological activity of FOS as well as on the binding affinity of candidate drugs targeting FOS. Sequences happeting POS, sequences are also useful for studying the ebsences are also septembered to andidate drugs targeting FOS. Sequences healthing general for general pair in the binding affinity of candidate drugs targeting FOS. Sequences used for detecting FOS and incombination of pair and pair and the binding affinity of the pair and th gene polymorphisms

Sequence 15 BP; 7 A; 0 C; 4 G; 3 T; 0 U; 1 Other;

. 0 Score 12; DB 1; Length 15; Pred. No. 5.1e+02; 1; Indels 1; Mismatches 4.1%; 85.7%; 893 ACTICICAGCITCI 906 N Conservative 15 ASTICICATOTICI Query Match Best Local Similarity 12; Matches à g

RESULT 611 ABK16655/

ABK16655 standard; DNA; 15 BP ABK16655;

(first entry) 14-MAR-2002 

Human AGTRL1 gene allele-specific oligonucleotide sequencing primer #9.

Human, angiotensin receptor-like 1, AGTRL1; haplotyping; haplotype pair; single nucleotide polymorphism; genotyping; gene therapy; drug screening, hypertension; ss; probe; sequencing primer; PCR primer.

Homo sapiens

WO200190123-A2

29-NOV-2001.

23-MAY-2001; 2001WO-US016906

23-MAY-2000; 2000US-0206264P.

(GENA-) GENAISSANCE PHARM INC.

Tanguay DA; Kliem SE, Messer C,

WPI; 2002-097637/13.

New isolated polymorphic variant of human angiotensin receptor-like 1

The invention relates to single nucleotide polymorphisms in the gene encoding the human angiotensin receptor-like 1 (AGTRL1) polypeptide. A encoding the human angiotensin receptor-like 1 (AGTRL1) polypeptide. A careful of the for haplotyping the AGTRL1 gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the AGTRL1 haplotype pair. This method is useful in genotyping, are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype for the haplotype or haplotype pair in a population exhibiting the trait with the frequency of the haplotype or haplotype pair in a population exhibiting the trait with the frequency of the haplotype or haplotype pair in a reference compulation, where a haplotype or haplotype pair in a population of haplotype pair.

AGTRL1 and its corresponding DNA are used for studying the expression and indicates the trait is associated with the haplotype or haplotype pair.

AGTRL1 and its corresponding DNA are used for studying the expression and cliseases related to AGTRL1 activity, such as hypertension. The sequences are also useful for studying the effect of variation on the biological are also useful for studying the effect of variation on the biological activity of AGTRL1 as not the binding affinity of Candidate drugs oligonucleotide probes, sequencing primers and PCR primers used to detect AGTRL1 gene polymorphisms targeting AGTRL1; Sequences ABK16638-ABK16682 represent allele-specific (AGTRL1) gene useful for expressing AGTRL1 protein isoform to screen drugs to treat AGTRL1 activity-related disease. Claim 16; Page 13; 71pp; English. 

Sequence 15 BP; 1 A; 7 C; 4 G; 2 T; 0 U; 1 Other;

Gaps .. 4.1%; Score 12; DB 1; Length 15; 85.7%; Pred. No. 5.1e+02; ive 1; Mismatches 1; Indels 85.7%; Conservative Local Similarity 12; Query Match Best Loca Matches

; 0

746 AGGGICCCAGGGIC 759 

g

ö

Gaps

ð

ABL57178 standard; DNA; 15 RESULT 612 ABL57178/c

BP. ABL57178; 

(first entry) 05-AUG-2002

Primer for FY gene polymorphism detection.

Duffy; blood group; FY; human; receptor; haplotyping; genotyping; transgenic animal; malaria; inflammation; antimalarial; protozoacide; antiinflammatory; single nucleotide polymorphism; SNP; PCR; primer; ss. Duffy; blood

Homo sapiens

WO200230950-A2.

18-APR-2002.

15-OCT-2001, 2001WO-US042725.

13-OCT-2000; 2000US-0240275P.

(GENA-) GENAISSANCE PHARM INC Koshy B; Choi JY, Chew A,

WPI; 2002-426264/45.

Novel genetic variants of Duffy Blood group (FY) gene useful for screening drugs to treat diseases e.g. malaria and inflammatory disorders.

```
Claim 15; Page 14; 98pp; English.
\overset{\mathrm{M}}{\times}\overset{\mathrm{M}}{\times}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\overset{\mathrm{M}}{\circ}\overset{\mathrm{M}}{\overset{\mathrm{M}}{\overset{\mathrm{M}}}{\overset{\mathrm{M}}{\overset{\mathrm{M}}{\overset{\mathrm{M}}}{\overset{\mathrm{M}}{\overset{\mathrm{M}}}{\overset{\mathrm{M}}{\overset{\mathrm{M}}}{
```

The present sequence is an allele-specific oligonucleotide primer that was designed to detect a specific polymorphism in the human Duffy blood group (FY) gene (see ABL57160). The primer is one of a set (see ABL57167-98) that can be used in a kit for haplotyping or genotyping the FY gene of an individual. The primer has a 3' penultimate nucleotide that is complementary to only one nucleotide of a particular single nucleotide polymorphism, and acts as a primer for polymerase-mediated extension only if the allele containing that nucleotide is present. The invention provides novel genetic variants of the FY gene, and discloses various genotypes, haplotypes and haplotype pairs that exist in the general United States population. Compositions and methods for haplotyping and/or genotyping the FY gene in an individual are also disclosed. The polymorphism and haplotype data are useful for validating FY as a candidate target for treating a condition or disease associated with FY activity, such as malaria and inflammatory discase associated with FY

Sequence 15 BP; 2 A; 0 C; 8 G; 4 T; 0 U; 1 Other;

Gaps 0; Score 12; DB 1; Length 15; Pred. No. 5.1e+02; 1; Indels 1; Mismatches Query Match
Best Local Similarity 85.7%; 919 TCATCACCACC 932 15 TSACCACCACCACC 2 12; Conservative Matches 셤

ö

ABK96512 standard; DNA; 15 (first entry) 24-SEP-2002 ABK96512; ABK96512/C
ID ABK96
XX
AC ABK96
XX
XX
DT 24-Si
XX
DDE Humar
XX
DDE Humar
XX
COC GENER
CO

Human PLAU gene, allele specific primer #21.

genotype; SNP; Human; ss; primer; Plasminogen activator; urokinase; PLAU; cancer; cytostatic; serine protease; thrombolytic disorder; isogene; PCR; pulmonary embolism; chromosome 10q24-qter; haplotype; genotype; SNI single nucleotide polymorphism; thrombolytic; gene therapy.

Homo sapiens.

WO200240503-A2

14-NOV-2001; 2001WO-US044001.

17-NOV-2000; 2000US-0249703P

(GENA-) GENAISSANCE PHARM INC.

B, Koshy Anastasio AE, Bentivegna SC,

WPI; 2002-519370/55.

Genetic variants of Plasminogen activator, Urokinase (PLAU) isogenes, useful for improving efficiency and reliability in drug development for treating thrombolytic disorders and cancer.

Claim 14; Page 14; 92pp; English.

The invention relates to a polynucleotide comprising a first nucleotide sequence (NSI) comprising a PLAU (plasminogen activator, urokinase, a serine protease) isogene selected fusminogen activator, urokinase, at the specification, where each isogene comprises the regions of the plau gene or cDNA and is further defined by the corresponding sequence of polymorphisms (defining single nucleotide polymorphisms, SNP). Also included are methods of haplotyping/genotyping (and predicting the

haplotype/genotype of the PLAU gene of an individual, identifying an association between a trait and at least one haplotype or haplotype pair of the PLAU gene, an isolated oligonucleotide for detecting a polymorphism in the PLAU gene, a recombinant non-human organism transformed or transfected with the gene or CDNA, fragments of the polymorphism in the PLAU gene, a recombinant non-human organism tie, an isolated act least 10 base pairs encompassing a polymorphic variant PLAU protein or fragment, an isolated monoclonal antibody specific for PLAU, a computer system for storing and analysing polymorphism data for the PLAU gene and a genome anthology for the PLAU gene. PLAU is useful in screening for drugs targeting PLAU that are useful for improving the efficiency and cancers. The methods are useful for improving the efficiency and diseases associated with PLAU activity. The antibody is useful in the design of clinical trials for treating a specific condition of diseases associated with PLAU activity. The antibody is useful in diagnostic, prognostic and therapeutic methods. PLAU colludate to PLAU, and in expressing PLAU protein for use in screening for candidate plaus, and in expressing PLAU protein for use in screening for candidate drugs to treat diseases related to PLAU activity. The gene for PLAU is located on chromosome log34-qter. The present sequence is an allele plantation of plantar used to amplify PLAU polymucleotides with a specific polymorphism \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$

Sequence 15 BP; 4 A; 3 C; 4 G; 3 T; 0 U; 1 Other;

Gaps . 0 4.1%; Score 12; DB 1; Length 15; 35.7%; Pred. No. 5.1e+02; 1; Indels 1; Mismatches 85.7%; Local Similarity 85.7 nes 12; Conservative Query Match Best Loca Matches

·.

q

à

BP. AAD25004 standard; DNA; 15 AAD25004/c

AAD25004;

(first entry) 12-MAR-2002 Human AANAT gene polymorphism detecting ASO primer #18.

Human, genetic variant, arylalkylamine N-acetyltransferase; AANAT gene, haplotyping; genotyping; pineal gland disorder; melatonin synthesis; gene therapy; antisense therapy; allele specific oligonucleotide; ASO primer; polymorphism; ss.

Homo sapiens.

WO200187909-A2.

22-NOV-2001.

18-MAY-2001; 2001WO-US016279. 

18-MAY-2000; 2000US-0205068P.

(GENA-) GENAISSANCE PHARM INC

Nandabalan K; Kazemi A, Choi JY,

WPI; 2002-055682/07.

New genetic variants of human arylalkylamine N-acetyltransferase (AANAT) gene for studying expression, function of the gene and expressing AANAT protein for use in screening for drugs to treat disorders of pineal

gland.

Claim 16; Page 13; 67pp; English.

```
acetyltransferase (AANAT) gene. The invention also relates to compositions and methods for haplotyping and/or genotyping the AANAT compositions and methods for haplotyping and/or genotyping the AANAT gene. Dolymorphic variants of AANAT polymorlectides are useful for screening for drugs targeting the polypeptide. AANAT polymorlectides are useful for studying the expression and function of AANAT and for expressing AANAT or protein for use in screening for candidate drugs to treat diseases related to AANAT activity. The methods are used to develop diagnostic tests and therapeutic treatment for disorders of pineal gland that derive from defects in melatonin synthesis. It is useful for determining whether an individual has one of the haplotypes 1-4 or the haplotype pairs. The haplotyping method is useful to validate AANAT as a candidate target for treating a specific condition or disease predicted to be associated with AANAT activity. AANAT sequences of the invention are also used in gene therapy and antisense therapy. The present DNA sequence is an allele specific oligonucleotide (ASO) primer which is used for detecting human
The patent discloses novel genetic variants of the arylalkylamine N-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AANAT gene polymorphisms
55555555555555555555<del>8</del>8
```

4.1%; Score 12; DB 1; Length 15; 85.7%; Pred. No. 5.1e+02; ative 1; Mismatches 1; Indels Sequence 15 BP; 1 A; 5 C; 3 G; 5 T; 0 U; 1 Other; 841 CTCTGAAGACAGCG 854 Query Match Best Local Similarity 85.75 Matches 12; Conservative 15 cwcrcaacacaca 2

δ g

·.

Gaps

..

Hepatitis C virus substrate #1053 for HCV hammerhead ribozyme #1053 ABX01271 standard; RNA; 15 BP. 23-DEC-2002 (first entry) ABX01271; RESULT 615 ABX01271

Enzymatic nucleic acid, RNA cleavage, Hepatitis C virus infection, HCV ribozyme; HCV expression, HCV replication, cirrhosis, virucide, liver failure, hepatocellular carcinoma, HCV infection, drug therapy, type I interferon, interferon alpha, interferon beta, cytostatic, interferon gamma; consensus interferon, hepatotropic; antiinflammatory, substrate, hammerhead ribozyme, HH ribozyme; ss. 

Hepatitis C virus.

US2002082225-A1.

27-JUN-2002.

99US-00274553. 23-MAR-1999; 99US-00274553. 23-MAR-1999;

MCSWIGGEN J A. ROBERTS B. PAVCO P A. BLATT L. (BLAT/)

MACEJACK D (MCSW/) (ROBE/) (PAVC/) (MACE/)

ä Pavco PA, Macejack ă Roberts Mcswiggen JA, Blatt L,

WPI; 2002-617759/66.

New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.

Claim 1; Page 51; 80pp; English

The present invention relates to enzymatic nucleic acids which

. specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin of the substrate the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV contribution as are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or hepatocellular carcinoma. The HCV incorpus are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was obtained in electronic format directly from the USPTO web site at low low bone mineral density; BMD; bone damage; polymorphism; osteoporosis; single nucleotide polymorphism; SNP; PCR primer; ss; human. The present invention describes a method of determining whether an individual is predisposed to susceptibility to low bone mineral density (BMD) and/or bone damage comprising identifying whether the individual has at least one polymorphism in a polymucleotide encoding a protein, where the polymucleotide is one of 81 200-500 nucleotide sequences (S1, see ADC98125 to ADC98115). An agent identified in an method from the present invention which can be used for the prevention or treatment of disease resulting in susceptibility to low BMD and/or bone damage is to Gaps Bennett S; Determining whether an individual is predisposed to susceptibility (bone mineral density (BMD) and/or bone damage, involves identifying .; 0 4.1%; Score 12; DB 1; Length 15; 75.0%; Pred. No. 5.1e+02; ive 3; Mismatches 0; Indels Galwey N, NOT304 polymorphism marker PCR primer B primer seq. Seguence 15 BP; 2 A; 7 C; 3 G; 0 T; 3 U; 0 Other; Townley DJ, Mangion J, seqdata.uspto.gov/psipsDIDEntry.html Example 8; Page 238; 246pp; English. polymorphisms in associated genes. BP. 19-DEC-2002; 2002WO-US040948. 20-DEC-2001; 2001US-0342711P. 04-NOV-2002; 2002US-0423559P. Query Match
Best Local Similarity 75.0%;
Matches 9; Conservative (INCY-) INCYTE GENOMICS INC. ADC98469/c ID ADC98469 standard; DNA; 16 (first entry) 856 CCTGGCTCCAGT 867 1 ccuggcuccagu 12 Valdes A, Schafer A; WPI; 2003-559156/52. WO2003054218-A2. Homo sapiens. 01-JAN-2004 03-JUL-2003. Jones KA, Synthetic. ADC98469; Mckay I, RESULT 616 g ò

```
·
0
useful in the manufacture of a medicament for use in modulating the ausceptibility to low BMD and/or bone damage. The disease associated with low BMD and/or bone damage is osteoporosis. The present PCR primer sequence is used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The sequences given in AAQ26461-81 are probes which were used within the scope of the invention to type class II HLA DQB1 alleles. These probes were used to screen sequences amplified from the DQB1 gene second exon sequence. This method could be use to identify new DQB1 alleles. This method provides a simple, rapid and precise system for DQB1 typing, including those alleles which cannot be distinguished by scrological methods. The presence or absence of a particular HLA DQB1 allele serves as an indicator of susceptibility to insulin-dependent diabetes mellitus (IDDM). Accurate DQ typing is particularly important in the field of cognan transplantation and in the study of the molecular basis of disease susceptibility. Moreover, samples from unusual sources, eg ancient DNA or forensic samples, can be typed, even when the DNA sample is degraded of colly present in an small amount. (Updated on 25-MAR-2003 to correct PN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel method for typing HLA DQB1 alleles - for tissue typing, determining identity, and for studying disease susceptibility.
                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR; polymerase chain reaction; amplify; class II HLA DQB1; insulin-dependent diabetes mellitus; IDDM; forensics; ss.
                                                                                                                                                                                                                                               4.1%; Score 12; DB 1; Length 16; 100.0%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                             Sequence 16 BP; 2 A; 5 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 3 A; 3 C; 8 G; 2 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                     100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (HOFF ) HOFFMANN LA ROCHE & CO AG F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 30; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAQ26479 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           91WO-US009796.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 90US-00632180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                            703 TCCAGCGAGTCC 714
                                                                                                                                                                                                                                                                                    Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                            13 TCCAGCGAGTCC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1992-250108/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9211389-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-DEC-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-JUL-1992.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAR-2003
08-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Probe DB203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Erlich HA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ26479;
                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              field.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAQ26479/NID AAQ26479/NID AAQ26479/NID AAQ26479/NID AAQ20NID AAQ20
   8 X G G G G
                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

```
The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (LL-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                               Vascular endothelial growth factor receptor; VBGF receptor; flt-1; flk-1; MSD; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                Human KDR VEGF receptor hammerhead ribozyme substrate #626.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.1%; Score 12; DB 1; Length 17; 75.0%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Escopedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 4; Page 116; 218pp; English.
                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                               96WO-US017480,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              95US-0005974P.
96US-00584040.
16 CCCCTCCAGHGACTT 1
                                                                                                 AAX71614 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX71615 standard; RNA; 17
                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                               fms-like tyrosine kinase 1
foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           800 GAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (CHIR ) CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 9; Conserv
                                                                                                                                                                                                                                                                                                                                                             W09715662-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                               25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-JAN-1996;
                                                                                                                                                                 28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                             01-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-JUL-1999
                                                                                                                                 AAX71614;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX71615;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                RESULT 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX71615
                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

0;

Match 4.1%; Score 12; DB 1; Length 17; Local Similarity 81.2%; Pred. No. 5.9e+02; es 13; Conservative 1; Mismatches 2; Indels

Query Match Best Local S

Matches

0;

Gaps

. 0

```
synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (fll-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, coular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                     Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes nucleic acid molecules which modulate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin riboxyme; hammerhead riboxyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiniflammatory; antiarthritic; antipsoriatic; ARND; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; vertuca vulgaris; anglofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
                                                                      KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Integrin alpha 6 subunit substrate sequence SEQ ID NO:3652.
                Human KDR VEGF receptor hammerhead ribozyme substrate #627.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
4.1%; Score 12; DB 1; Length 17;
Best Local Similarity 75.0%; Pred. No. 5.9e+02;
Matches 9; Conservative 3; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Seguence 17 BP; 1 A; 6 C; 3 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 4; Page 116; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA20426 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                    95US-0005974P.
96US-00584040.
                                                                                                                                                                                                                                                                                             96WO-US017480
                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19-JUN-2000 (first entry)
                                                                                                                                        foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  800 GAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAGCUCUCCUCC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pavco P, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                                                                                                                                   (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                  26-OCT-1995;
11-JAN-1996;
                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                   WO9715662-A2
                                                                                                                                                                                                                                                                                               25-OCT-1996;
                                                                                                                                                                                                                                                          01-MAY-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAA20426;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA20426,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

```
AAA21596 to AAA21688 represent their corresponding target sequences;
AAA21689 to AAA22475 and AAA23263 to AAA23326, AAA23343 to
for integrin subunit beta 3, and AAA22476 to AAA23326, AAA23343 to
AAAA2342 represent their corresponding target sequences. The ribozymes of
the invention are used for modulating the synthesis, expression and/or
stability of an mRNA encoding angiogenic factor, especially ARNT,
integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are
especially used to treat cancer, diabetic retinopathy, age related
macular degeneration (ARMD), inflammation, and arthritis, as well as
necvascular glaucoma, myopic degeneration, sporiasis, vertuca vulgaris,
angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber
syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome,
and other syndromes and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl dydrocarbon nuclear transporter (RNYT) gene, an integrin subunit beta 3 gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA1762 to Freesent ribozyme sequences for ARNT, and AAA1768 to AAA1768 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19155 to AAA19222 represent their corresponding target sequences for Tie-2, and AAA19087 to AAA19223 to AAA19221 represent their corresponding target sequences; AAA19223 to AAA2921501 to AAA21595 represent ribozyme sequences; AAA19223 to AAA29231601 and AAA21501 to AAA21595 represent ribozyme sequences; AAA19223 to AAA292302 to AAA21501 to AAA21595 represent ribozyme
                                                                                                                                                                                                                                                                                                                                                                                 Novel ribozymes for modulating the synthesis, expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
    SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome;
                                                                                                                                                                                                                                                                                                Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Integrin alpha 6 subunit substrate sequence SEQ ID NO:3653.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seguence 17 BP; 4 A; 2 C; 4 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                  Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                       of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 55; Page 145; 305pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.13,
100.0%; Pre
                                                                                                                                                                                                                                                                                                  Jarvis I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                 98US-0079678P.
                                                                                                                                                                       99WO-US006507.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA20427 standard; RNA; 17
                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         954 AAGAGCCAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17 AAGAGCCAAATT
                                                                                                                                                                                                                                                                                                  Roberts E,
                                                                                                                                                                                                                                                                                                                                            WPI; 1999-591315/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
nes 12; Conserv
                                            Homo sapiens
                                                                                                                                                                       24-MAR-1999;
                                                                                     W09950403-A2
                                                                                                                                                                                                                 27-MAR-1998;
                                                                                                                             07-0CT-1999
                                                                                                                                                                                                                                                                                                  Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA20427;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA20427,
    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
```

ö

;

Forward primer #3 used to sequence UGT2B4 polymorphic fragments.

```
The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl bydrocarbon nuclear transporter (ARNF) gene, an integrin subunit beta 3 gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16675 to AAA17168 to AAA17168 to AAA1768 to AAA1768 to AAA1768 to AAA1768 to AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA1838 to AAA19087 to AAA19154 represent ribozyme sequences for Tie-2, and AAA1838 to AAA19087 to AAA19152 represent their corresponding target sequences; AAA1923 to AAA42052 represent their corresponding target sequences; AAA1923 to AAA2051 and AAA2159 represent ribozyme sequences of integrin alpha 6 subunit, and AAA2036 to AAA2160 and AAA21689 to AAA21689 represent their corresponding target sequences; AAA21689 to AAA21675 and AAA2163 to AAA21362. AAA2183 to AAA21689 to AAA21675 and AAA2163 to AAA21362. AAA2183 to AAA21689 to AAA21675 and AAA2168 to AAA21362. AAA2184 to AAA21689 to AAA21689 represent their corresponding target sequences; AAA21689 to AAA21689 represent their corresponding target sequences; corresponding target sequences; and AAA21689 to AAA2189 to AAA21689 to AAA2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
                             dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; veruca vulgaris; anglofibroma; tuberous sclerosis; pot-wine stain; glurge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
antiinflammatory; antiarthritic; antipsoriatic; ARMD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 12; DB 1; Length 17; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 4 A; 2 C; 5 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 100.0%; Pred. No. 5.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 55; Page 145; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ95121 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US006507.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0079678P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    05-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         954 AAGAGCCAAATT 965
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pavco PA, Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGAGCCAAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-591315/50.
                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                               W09950403-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                               07-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAZ95121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 6
SECOND CONTRACTOR CONT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BXXXEX
```

```
This sequence represents a primer used to sequence polymorphic fragments of the human UDP-glucuronosyltransferase 284 (UGT2B4) gene. UDP-glucuronosyltransferases (1972) are a family of enzymes that catalyse the glucuronic acid conjugation of a wide range of endogenous and excgenous glucuronic acid conjugation of a wide range of endogenous and excgenous cubstrates. The UGT2B gene subfamily encode steroid metabolizing isoforms to the liver. Alteration of the expression or function of UGTS may effect drug metabolism. The invention relates to non-chromosomal nucleic acid molecules, which comprise human UGT2B sequence polymorphisms (see molecules, which comprise num udf2PB sequence polymorphisms can be used to detect altered UGT2B metabolism of a substrate in an individual. The nucleic acid molecules comprising a human UGT2B sequence polymorphism can be used in screening assays for genotyping individuals, also to predict their rate of metabolism of UGT2B substrate, potential drug-drug interactions and adverse side effects. The polymorphisms can be used as single nucleotide polymorphisms (SNPs) for detecting genetic UGT2B protein. The polymorphisms containing nucleic acid molecules may also be used for generating geneticially modified non-human animals and for obtaining site specific gene modification in cell lines
                                     UDP-glucuronosyltransferase 2B4; UGT2B4; polymorphism; metabolism; SNPs; drug interaction; detect; human; single nucleotide polymorphism; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel human UDP-glucuronosyltransferase sequence, polymorphisms for genotyping individuals to predict rate of metabolism of substrates and for identifying potential drug interactions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis; allele specific ollogonucleotide; AGC; reduced complexity genome; RCG; genomic classification; identification; DNA fingerprinting; tumour characterisation; hybridisation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human genomic SNP allele specific oligonucleotide SEQ ID NO:236.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 4 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100.0%; Preu. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 1; Page 18; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA36179 standard; DNA; 17 BP.
                                                                                                                                                                                                                                              99WO-US016675.
                                                                                                                                                                                                                                                                                      98US-0094391P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      958 GCCAAATTGACT 969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12; Conservative
                                                                                                                                                                                                                                                                                                                            (AXYS-) AXYS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                    Miller A,
                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-195321/17.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                              WO200006776-A1
                                                                                                                                                                                                                                              22-JUL-1999;
                                                                                                                                                                                                                                                                                      28-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-JUL-2000
                                                                                                                                                                                                      10-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                    Galvin M,
                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA36179;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA36179
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
```

. 0

..

Gaps

Holman

```
Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; inizyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HTV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; cerebroterapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                       The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chkl) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chkl levels, including cancer. The present sequence is an oligonucleotide described in the exemplification of the invention
                                                                              Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 12; DB 1; Length 17;
100.0%; Pred. No. 5.9e+02;
ive 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 4 A; 1 C; 8 G; 0 T; 4 U; 0 Other;
Mcswiggen J, Booher RN,
                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Pred. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chowrira BM;
                                                                                                                                                                        Claim 4; Page 89; 115pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABK01376 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-FEB-2001; 2001WO-US004273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                801 AGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                        12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human NOGO Inozyme #646.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM (BLAT/) BLATT L. (MCSW/) MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J,
  Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16 AGCTCTCCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-607195/69
                                          WPI; 2001-496922/54
                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-AUG-2001.
    Fattaey AR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABK01376;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (CHOM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABK01376/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A method has been developed for detecting the presence or absence of a single nucleotide polymorphism (SNP) allele in a genomic sample. The method comprises preparing a reduced complexity genome (RCG) from the genomic sample and analysing the RCG for the presence or absence of a SNP allele. The method can be used to characterise a tumour, to generate a genomic pattern for an individual genome or to generate a genomic classification code for a genome. The method can be used to assess whether a subject is at risk for developing a disease or to identify a set of SNP alleles associated with a disease. The method can also be used to perform linkage analysis. AAA15944 to AAA35947 represent sequences used in the exemplification of the present invention, AAA35948 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                     Detection of single nucleotide polymorphisms in genomes by preparation and analysis of reduced complexity genomes, useful for genotyping, fingerprinting and determining allele frequency of SNPs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 5.9e+02; rative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA36632 represent nucleotide sequences containing SNPs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 3 A; 10 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                        Charest A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human Chk1 ribozyme substrate SEQ ID NO: 1231.
                                                                                                                                                                                                                                                (MASI ) MASSACHUSETTS INST TECHNOLOGY.
                                                                                                                                                                                                                                                                                        Housman DE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 60; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAH95806 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-FEB-2001; 2001WO-US003504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-FEB-2000; 2000US-0179983P
                                                                                                                                                             99WO-US022283
                                                                                                                                                                                                       98US-0101757P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC. (FAIT/) FAITAEY A R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   926 CACCACCCTCCA 937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACCACCTCCA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cancer; ss
                                                                                                                                                                                                                                                                                           Jordan B,
                                                                                                                                                                                                                                                                                                                                   WPI; 2000-293181/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200157206-A2.
                                                                            WO200018960-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RNA cleavage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-AUG-2001.
                                                                                                                                                             24-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-OCT-2001
                                                                                                                                                                                                       25-SEP-1998;
                                                                                                                    06-APR-2000.
                                                                                                                                                                                                                                                                                             Landers JE,
```

AAH95806;

AAH95806, RESULT

m

Matches

ð

ö

Gaps 0;

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gane or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88; Page 88; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NRY motif) propersessing an NCH motif), a G-cleaver (cleaving RNA with a NRY motif) an amberzyme (cleaving RNA with an NRY motif) an amberzyme (cleaving RNA with an NRY motif) a zinzyme (cleaving RNA with a NRY motif) and the presence of a divalent cation that is preferably Mg⁻²+.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more theory of the coll of CD20. The presence of a divalent cation that is preferablar NHL, lymphocytic lymphoma (NHL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, clumban immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, contacted with a cell to reduce NOGO gene in the presence of a divalent cation that is preferably Mg⁻²+. Furthermore, the created may be contacted with a cell to reduce NOGO gene in the presence of a divalent cation that is preferably Mg⁻²+. Furthermore, the NOGO. The treatment may further comprise the use of one or more coll and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more coll and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more coll and treat a patient having a condition associated with the level of NOGO and a disease, adasted, dementical mervous system (CNS) injury and cerebrovascular accident (CNA, stroke), Alzheimer's disease, dementies or central nervous system (CNS)

sequence is an inozyme of the invention

Sequence 17 BP; 11 A; 1 C; 4 G; 0 T; 1 U; 0 Other;

Gaps .; Query Match 4.1%; Score 12; DB 1; Length 17; Best Local Similarity 100.0%; Pred. No. 5.9e+02; Matches 12; Conservative 0; Mismatches 0; Indels

895 TICICAGCTICI 906 m 14 TTCTCAGCTTCT

g

ABK02006 standard; RNA; 17 BP.

ABK02006;

Human NOGO Zinzyme #328.

12-MAR-2002 (first entry)

cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NGG0; hammerhead ribozyme; DNAzyme; inczyme; nocyme; seleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; MHL; lymphocytic leukaemia; human immunodeficiency virus; lymphoma; MHL; lymphocytic leukaemia; human immunodeficiency virus; lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease; Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; 

Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

Synthetic 

WO200159103-A2.

16-AUG-2001.

09-FEB-2001; 2001WO-US004273.

11-FEB-2000; 2000US-0181797P.

28-FEB-2000; 2000US-0185516P.

(RIBO-) RIBOZYME PHARM INC. BLATT L. (BLAT/)

(CHOW/) CHOWRIRA B M. MCSWIGGEN J. MCSW/)

Chowrira BM; Mcswiggen J, Blatt L,

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88; Page 101; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGOD). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule opssessing an NCH motif), a C-cleaver (cleaving RNA with a NCH niple), a zinzyme (cleaving RNA with an NGN triple!), a zinzyme (cleaving RNA with an NGN triple!), a zinzyme (cleaving RNA with an NGN triple!), a zinzyme (cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD30 in the presence of a divalent cation that is preferably MG²+. C Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more thearings. In particular, he CD20 targetting nucleic acid may be used to treat lymphoma (MLL), bulky low-grade or follicular non-Hodgkin's lymphoma (MLL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immunocytopaenia, and inflammatory arthropathy The NOGO activity of the createnent may further comprise the use of one or more cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more thear central nervous system (CNS) injury and cerebrocyacular acid may b disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a zinzyme molecule of the invention

Sequence 17 BP; 9 A; 1 C; 5 G; 0 T; 2 U; 0 Other;

Gaps ., 4.1%; Score 12; DB 1; Length 17; 00.0%; Pred. No. 5.9e+02; 0; Indels 100.0%; Pred. wc. Matches 12; Conservative Local Similarity

0

895 TICICAGCIICI 906 Ŋ 16 Trereagerier q ò

RESULT 627

```
The present invention provides single-stranded oligonucleotides which can be used for the targeted alteration of genomic sequences, where the oligonucleotide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, tetinologatoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A (CDENZA), APC, Factor VII, Factor IX, haemoglobin alpha locus apolloportein E (APOR), LDL receptor (LDLR), UDP-glucuronosyltransferase (UGTI), amyloid precursor protain (APC), presentiin-1 (PSENI) and presentilin-2 (PSENI). These can be used in the gene through of diseases
                                                                                                                                                                          Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDRV2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE; mismatch repair; MSH6; hyperlipidaemia; apolipoprotein E; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; BSBN1; antisense; UDP-glucuromosyltransferase; amyloid precursor protein; presentlin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              such as cancer, adenosine deaminase deficiency, cystic fibrosis, haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonuclectide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 5.9e+02; Ve. 0; Mismatches 0; Indels
                                                                                                                                          BRCA1 mutation correcting oligonucleotide SEQ ID NO: 884.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   oligonucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 7; Page 98; 294pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Rice MC;
                   ABA78038 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-MAR-2000; 2000US-0192179P.
01-JUN-2000; 2000US-0208538P.
30-OCT-2000; 2000US-0244989P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-MAR-2001; 2001WO-US009761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-MAR-2000; 2000US-0192176P.
                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kmiec EB, Gamper HB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (UYDE ) UNIV DELAWARE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-639230/73.
                                                                                                                                                                                                                                                                                                                                                                             antilipemic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200173002-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                     24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-OCT-2001
ABA78038
```

```
The present invention provides single-stranded oligonucleotides which can be used for the targeted alteration of genomic sequences, where the oligonucleotide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, retinoblastoma, BRCA, BRCA, CFTR, cyclin-dependent kinase inhibitor 2A (CDKN2A), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus 1 (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6, applicationsyltransferase (UGT1), amyloid precursor protein (LDC), presentlin-1 (PSEN1) and presentlin-2 (PSEN2). These can be used in the gene therapy of diseases such as cancer, adenosine deaminase deficiency, cystic fibrosis.
                                                                                                                                                           Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor ZA; CDRVA3; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VI; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH; APOB; mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDDR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense; UDP-glucuromosyltransferase; amyloid precursor protein; presentlin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 12; DB 1; Length 17;
100.0%; Pred. No. 5.9e+02;
ive 0; Mismatches 0; Indels
                                                                                                                            BRCA1 mutation correcting oligonucleotide SEQ ID NO: 883.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 6 A; 4 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           various syndromes. The present secoligonucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 7; Page 98; 294pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rice MC;
                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-MAR-2000; 2000US-0192176P.
27-MAR-2000; 2000US-0192179P.
01-JUN-2000; 2000US-028538P.
30-OCT-2000; 2000US-0244989P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-MAR-2001; 2001WO-US009761.
              ABA78037 standard; DNA; 17
                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                877 TTCCTGAGATGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14 rrccrcadardc 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gamper HB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (UYDE ) UNIV DELAWARE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-639230/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ouery Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                 antilipemic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                          WO200173002-A2.
                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   04-OCT-2001
                                                                                           24-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kmiec EB,
                                                       ABA78037;
4BA78037,
                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

ó

0

Gaps

; 0

100.0%; Preq. ...

877 ITCCTGAGAIGC 838

4 Trecreadarde 15

g

12; Conservative

Matches

Sequence 17 BP; 6 A; 2 C; 4 G; 5 T; 0 U; 0 Other;

gg

```
ABK25163 standard; DNA; 17 BP
                         Synthetic
    ABK25163;
RESULT 629
ABK25163/
ID ABK2
```

```
Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss; o-methyl modification; LNA modification; phosphorothioate linkage; DNA repair; DNA alteration; environmental tolerance; hygromycin-B; abiotic stress tolerance; improved nutritional value; hygromycin, primer; amino acid over production; herbicide resistance; glyphosate resistance; imidazolinone herbicide resistance; sulphonylurea herbicide resistance; porphyric herbicide resistance; triazine resistance; disease resistance; modified oil production; modified starch production; waxy starch; and thered floral morphology; male-sterile plant; albino mutant; modified fatty acid content; reduced plant; albino mutant; increased stearate production; reduced linolenic acid production;
                                                                                                  Wale-sterile plant producing genome altering oligonucleotide #63.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-2001; 2001WO-US017672.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   photosynthetic process.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antirrhinum majus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200192512-A2.
    09-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-DEC-2001
```

01-JUN-2000; 2000US-0208538P. 30-OCT-2000; 2000US-0244989P. 27-MAR-2001; 2001US-00818875. (UYDE ) UNIV DELAWARE

New oligonucleotides with modified nuclease-resistant termini, useful for creating plants with desired phenotypes, e.g. stress tolerance, improved nutritional value, herbicide or disease resistance, or modified oil Kim J; Rice MC, Kmiec EB, Gamper HB, WPI; 2002-106307/14. production

Claim 7; Page 75; 220pp; English.

The invention relates to an oligonucleotide for targeted alteration of a panetic sequence, which comprises a single-stranded oligonucleotide having a DNA domain. The DNA domain has at least one mismatch with respect to the genetic sequence to be altered and further comprises chemical modifications of the oligonucleotide. The chemical modifications of the oligonucleotide. The chemical modifications phosphorothioate linkages on a terminus, or a combination of any two or more more of these modifications. The oligonucleotides are useful for directing repair or alteration of plant genetic information. The oligonucleotides are particularly useful for creating plants with desired plantovers, e.g. environmental or abiotic stress tolerance, improved nutritional value (e.g. alterating amino acid content of plants or conferring amino acid over production), herbicide resistance (e.g. glyphosate resistance, imidazolinone and sulphonylurea herbicide tesistance, porphyric herbicide resistance or triazine resistance), disease resistance, modified oil production, modified starch production (e.g. increased starch or production of waxy starch), altered floral morphology (e.g. male-sterile plants) or modified fatty acid content (e.g. reduced palmitate, increased stearate or reduced linolenic acid). The oligonucleotides are also useful for producing albino mutants for the analysis of photosynthetic processes. This sequence represents a genome altering oligonucleotide of the invention

```
curomosomal genomic alteration; genome altering oligonucleotide; PCR; ss; On-methyl modification; LNA modification; phosphorothioate linkage; DNA repair; DNA alteration; environmental tolerance; hygromycin-B; abiotic stress tolerance; improved nutritional value; hygromycin; primer; amino acid over production; herbicide resistance; alyphosate resistance; imidazolinone herbicide resistance; sulphonylurea herbicide resistance; porphyric herbicide resistance; triazine resistance; modified oil production; modified trazine resistance; modified oil production; modified trazine production; waxy starch; altered floral morphology; male-sterile plant; albino mutant; increased stearate production; reduced palmitate production; albino plant; increased stearate production; reduced linolenic acid production; photosynthetic process.
                         0;
                         Gaps
                                                                                                                                                                                                           Male-sterile plant producing genome altering oligonucleotide #64.
                         .
Score 12; DB 1; Length 17;
Pred. No. 5.9e+02;
                         0; Indels
                         0; Mismatches
4.1%; E
                                                                                                                                    ABK25164 standard; DNA; 17 BP.
                                                                                                                                                                                  (first entry)
                                                 970 CTCTAAATCTGG 981
                         12; Conservative
                                                                       13 crcraaarcres 2
            Similarity
                                                                                                                                                                                   09-APR-2002
                                                                                                                                                            ABK25164;
 Query Match
Best Local 9
                                                                                                             RESULT 630
                         Matches
                                                                                                                          ABK25164
                                                 ð
```

01-JUN-2000; 2000US-0208538P. 30-OCT-2000; 2000US-0244989P. 27-MAR-2001; 2001US-00818875. (UYDE ) UNIV DELAWARE.

01-JUN-2001; 2001WO-US017672.

Antirrhinum majus.

Synthetic

WO200192512-A2

06-DEC-2001

Rice MC, Gamper HB, Kmiec EB,

Kim J;

WPI; 2002-106307/14.

New oligonucleotides with modified nuclease-resistant termini, useful for creating plants with desired phenotypes, e.g. stress tolerance, improved creating plants with desired phenotypes, e.g. stress tolerance, imp nutritional value, herbicide or disease resistance, or modified oil production.

Claim 7; Page 75; 220pp; English.

The invention relates to an oligonucleotide for targeted alteration of a genetic sequence, which comprises a single-stranded oligonucleotide having a DNA domain. The DNA domain has at least one mismatch with respect to the genetic sequence to be altered and further comprises chemical modifications of the oligonucleotide. The chemical modifications of the oligonucleotide. The chemical modifications phosphorothioate linkages on a terminus, or a combination of any two or more more of these modifications. The oligonucleotides are useful for directing repair or alteration of plant genetic information. The oligonucleotides are particularly useful for creating plants with desired phenotypes, e.g. environmental or abiotic stress tolerance, improved nutritional value (e.g. altering amino acid content of plants or conferring amino acid over production), herbicide resistance (e.g.

```
glyphosate resistance, imidazolinone and sulphonylurea herbicide resistance, porphyric herbicide resistance or triazine resistance), disease resistance, modified oil production, modified starch production (e.g. increased starch or production of waxy starch), altered floral morphology (e.g. male-sterile plants) or modified fatty acid content (e.g. reduced palmitate, increased stearate or reduced linolenic acid). The oligonucleotides are also useful for producing albino mutants for the analysis of photosynthetic processes. This sequence represents a genome altering oligonucleotide of the invention
```

Sequence 17 BP; 5 A; 4 C; 2 G; 6 T; 0 U; 0 Other;

```
Length 17;
                        0; Indels
Score 12; DB 1; Le
Pred. No. 5.9e+02;
        100.0%; Prec. ...
  4.18;
                                                  970 CICTAAAICIGG 981
            Best Local Similarity 100.
Matches 12; Conservative
                                                                         5 CTCTAAATCTGG 16
   Query Match
                                                   à
                                                                         q
```

ö

Gaps

..

ABT35050 standard; DNA; 17 BP 12-JUN-2003 (first entry) ABT35050; RESULT 631 ABT35050 

Tumour suppression related human fukutin oligo SEQ ID No 687.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin;

Homo sapiens

WO2003025175-A2.

27-MAR-2003.

17~SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M;

Telerman A, Amson R,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 114; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RMA. The novel isolated nucleic of any of the invention are useful as probes and primers for detecting, acids of the invention are useful as probes and primers for detecting, component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and

```
expression of the 17 mer nucleic acids in
schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
```

```
Gaps
                                                                                                             0
                                                                                         Length 17;
                                                                                                             0; Indels
                                                                      Sequence 17 BP; 4 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                         Score 12; DB 1; L
Pred. No. 5.9e+02;
                                                                                    4.1%; Scor.
100.0%; Pred. No. ...
0; Mismatches
                                                                                                                                 879
                                                                                           Query Match
Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                   5 receacerric 16
                                                                                                                                  868 TGGAACACTITC
88866666888
                                                                                                                                  ð
                                                                                                                                                    q
```

·.

ABT34660 standard; DNA; 17 BP. (first entry) 12-JUN-2003 ABT34660; RESULT 632 ABT34660

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; Tumour suppression related human fukutin oligo SEQ ID No 297. human fukutin;

Homo sapiens.

WO2003025175-A2. 27-MAR-2003. 

.17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB

Tuijnder M;

Amson R,

Telerman A,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 68; 720pp; French

The invention relates to a novel isolated 17 mer nucleic acid sequence, a given in the specification, a sequence containing at least 15 consecutive given in the specification, a sequence as sequence with, after optimal aniquence in a sequence with, after optimal aniquence in a sequence in a sequence that least 80 % identity to the 17 mer sequence, a sequence that thy pridities to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, containing the nucleic acids, cells containing the polypeptides, vectors containing the nucleic acids, cells containing the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell desenses that are characterised by development of tumours or cell desencation, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these

used in gene

```
ö
                                                                                                                                                                                                                                                                                                                                        Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
           both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
diseases. The polypeptides can also be used to generate antibodies, and
                                                                                                                             Gaps
                                                                                                                            0
                                                                                                                                                                                                                                                                                                                  Tumour suppression related human fukutin oligo SEQ ID No 3446.
                                                                                                  4.1%; Score 12; DB 1; Length 17;
100.0%; Pred. No. 5.9e+02;
                                                                                                                         0; Indels
                                                                         Sequence 17 BP; 2 A; 5 C; 1 G; 9 T; 0 U; 0 Other;
                                                                                                          100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tuijnder M;
                                                                                                                                                                                                                                       ABT37809 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-SEP-2001; 2001FR-00011978.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-2002; 2002WO-IB004208
                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                  841
                                                                                                            Best Local Similarity 100.
Matches 12; Conservative
                                                                                                                                                                          rererrateric 14
                                                                                                                                                  830 TCTCTTTTCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-313353/30.
                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003025175-A2.
                                                                                                                                                                                                                                                                                         12-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-MAR-2003.
                                                                                                   Query Match
                                                                                                                                                                                                                                                                ABT37809;
                                                                                                                                                                                                              RESULT 633
                                                                                                                                                                                                                           ABT37809
8886666
                                                                                                                                                   ð
```

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the mucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophremia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein Disclosure; Page 436; 720pp; French.

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subult of nuclear factor kappa B (NEKB), where (I) is an incozyme, zinzyme, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A gene, in is useful for cleaving RNA comprising a sequence of REL-A gene, in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel enzymatic nucleic acid molecules which down regulates expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; prostate cancer; colorectal cancer; brain cancer; oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer; cervical cancer; had and neck cancer; ovarian cancer; melanoma; lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxel; dosetaxel; displatin; methotrexate; gencitabine; radiation therapy; inflammatory disease; asthma; diabetes; rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion injury; glomerulonephritis; allergic airway inflammatory bowel disease; infection; ss.
                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a sequence encoding a subunit of nuclear factor kappa B useful f
treating cancer, inflammatory disorders and autoimmune diseases.
                                                                                                                                              °,
chips. The nucleic acid sequences of the invention can be therapy. This polynucleotide sequence represents a tumour related human fukutin oligonucleotide of the invention
                                                                                                            Length 17;
                                                                                                                                            Indels
                                                                                                        4.1%; Score 12; DB 1; Le
100.0%; Pred. No. 5.9e+02;
ive 0; Mismatches 0;
                                                                  Sequence 17 BP; 5 A; 4 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                      NFKB sub-unit modulating inozyme substrate #531.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Draper KG;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 3; Page 35; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92US-00987132.
94US-00245466.
94US-00291932.
96US-00777916.
                                                                                                                                                                                                                                                                                                            ACA06712 standard; RNA; 17 BP.
                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-MAY-2001; 2001US-00864785
                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                868 TGGAACACTITC 879
                                                                                                                         Local Similarity 100.
Les 12; Conservative
                                                                                                                                                                                                                  TGGAACACTTTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (STIN/) STINCHCOMB D T.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MCSWIGGEN J.
DRAPER K G.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-340953/32.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US2002177568-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-MAY-1994;
15-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-DEC-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                  03-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-NOV-2002
                                                                                                                                                                                                                  Ŋ
                                                                                                                                                                                                                                                                                                                                              ACA06712;
                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DRAP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MCSM/)
                                                                                                                                                                                                                                                                         RESULT 634
                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                            ACA06712
8 X G G G
                                                                                                                                                                                                                                                                                                             ਨੋ
```

```
the presence of a divalent cation, especially Mg^2^+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stoomach, bladder, pancreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or multidrug resistant cancer. The method involves use of other drug therapies such as monoclonal antibodies, REL-A-specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, therapy. The enzymatic and antisense nucleic acid molecules are also useful for treating inflammatory disease such as chematoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lugus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury (central nervous system (CNS) and myocardial), glomerulonephritis, especisor. This sequence represents the substrate of a novel enzymatic nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 2 A; 6 C; 4 G; 0 T; 5 U; 0 Other;
```

4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 5.9e+02; ative 0; Mismatches 0; Indels 864 CAGITGGAACAC 875 Best Local Similarity 100. Matches 12; Conservative 14 CAGTIGGAACAC 3 Query Match ŏ g

ö

Gaps .. 0

> NFKB sub-unit modulating inozyme substrate #532. ACA06713 standard; RNA; 17 BP. 03-JUN-2003 (first entry) ACA06713; RESULT 635 ACA06713/c

Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; broin cancer; brain cancer; colorectal cancer; prain cancer; colorectal cancer; pancreatic cancer; colorectal cancer; pancreatic cancer; cervical cancer; head and neck cancer; ovarian cancer; malanoma; lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxal; docetaxel; cisplatin; methotraxate; cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate; gencitabine; radiation therapy; inflammatory disease; asthma; diabetes; prheumatorid arthritis; restenoâis; Crohn's disease; obsity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion injury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss. 

US2002177568-A1. Homo sapiens. 28-NOV-2002.

92US-00987132. 94US-00245466. 94US-00291932. 23-MAY-2001; 2001US-00864785. 96US-00777916. 07-DEC-1992; 18-MAY-1994; 15-AUG-1994; 23-DEC-1996;

(STIN/) STINCHCOMB D T. MCSWIGGEN J. DRAPER K G. (MCSW/) (DRAP/) Draper KG; Mcswiggen J, Stinchcomb DT,

WPI; 2003-340953/32.

Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases. 

Claim 3; Page 35; 72pp; English.

The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor regulates expression of a sequence encoding a subunit of nuclear factor configuration. The enzymatic nucleic acid molecule is adapted to treat configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for creating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially MG^2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or charapies such as monoclonal antibodies, REL-A specific inhibitors or therapies such as monoclonal antibodies, REL-A specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edatersate, chemated arrhitis; restenosis, asthma, Crohn's disease such as cobesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft crediction, gene therapy applications, ischaemia/reperfusion injury ceptection, gene therapy applications, ischaemia/reperfusion injury ceptection, this sequence represents the substrate of a novel enzymatic infection. This sequence represents the substrate of a novel enzymatic nucleic acid molecule

Sequence 17 BP; 2 A; 7 C; 3 G; 0 T; 5 U; 0 Other;

Gaps 0; Ouery Match
Best Local Similarity 100.0%; Pred. No. 5.9e+02;
Matches 12; Conservative 0; Mismatches 0; Indels

0

864 CAGITGGAACAC 875 N 13 CAGTIGGAACAC g à

ACC49069 standard; DNA; 17 BP. RESULT 636 ACC49069/ 

ACC49069;

17-JUN-2003 (first entry)

Human NOV2 CG140765-01 gene reverse PCR primer SEQ ID NO:32.

Human; NOVX; antidiabetic; anorectic; cardiant; hypotensive; virucide; antiarteriosclerotic; antibacterial; fungicide; protozoacide; nootropic; neuroprotective; antiparkinsonian; anticonvulsant; antinflammatory; osteopathic; antiarthritic; dermatological; antiasthmatic; antilipaemic; vulnerary; antiangiogenic; anabolic; gene therapy; metabolic antilipaemic; diabetes; obesity; infectious disease; anorexia; cancer; hypertension; cardiovascular disease; atherosclerosis; neurodegenerative disorder; Alzheimer; disease; parkinson's disease; epilepsy; immune disorder; osteoarthritis; haematopoietic disorder; inflammatory skin disorder; asthma; dyslipidaemia; neurogenesis; cell differentiation; wound healing; cell proliferation; haematopoiesis; angiogenesis; PCR primer; ss.

Homo sapiens. Synthetic.

20-MAR-2003.

MO2003022998-A2.

09-SEP-2002; 2002WO-US028498.

Lepley DM;

Gerlach VL, Lepicy

```
our in March 100 controlls. (1) made anticabetts, neutroprotective, cardiant, hypotennive, antiarteriosclerotic, antibacterial, virucide, fungicide, protozoacide, anticonvulsant, antiparkinsonian, nottropic, osteopathic, antiarthritic, antiinflammatory, dermatological, antiasthmatic, antilipaemic, vulnerary, antinflammatory, dermatological, antiasthmatic, antilipaemic, vulnerary, antinflammatory, dermatological, activities, and can be used in gene therapy. (I), nucleic acid encoding (I) and antibodies against (I) are useful in the manufacture of a medicament for treating a syndrome associated with a human disease, preferably a NOVX-associated disorder. The nucleic acid molecules, polypeptides and antibodies are useful for treating, preventing or disposing diseases such metabolic disorders, diabetes, obesity, infectious diseases (viral, bacterial, fungal, helminthic, and protozoal), anorexia, cancer, cardiovascular diseases (hyperension, atherosclerosis), neurodegenerative disorders, Alzheimer's disease, Parkinson's disease, epilepsy, immune disorders, asthma, and various dyslipidaemias. The nucleic acids and polypeptides may also be used as targets for the identification of small molecules that modulate
                                                                                                                                                                                                                                                                                                                                                                                                                  ACC49051 to ACC49063 encode the human proteins designated NOVX (I), where X is la, lb, lc, 2a, 2b, 2c, 2d, 2e, 2f, 2g, 3a, 3b and 3c respectively, given in ABP97007 to ABP97019. (I) have antidiabetic, neuroprotective,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                or inhibit e.g. neurogenesis, cell differentiation, cell proliferation, haematopoiesis, wound healing and angiogenesis and in gene therapy. The present sequence represents a PCR primer for a NOV2 sequence, which is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           c-jun; c-fos; jun-B; neuronal injury; cell death; neoplasm; antisense;
                                                                                                                                                                                                                                                                                         New isolated NOVX polypeptide, useful for preventing, diagnosing or treating NOVX-associated disorders, e.g. osteoarthritis, obesity, atherosclerosis, cancer, Parkinson's disease, asthma, or infections.
                                                                                                                                                                Burgess CE, Edinger SR, Gerlach VL
Pena CEA, Rieger DK, Shimkets RA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 2 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                used in an example from the present invention
                                                                                                                                                                                                                                                                                                                                                                               Example C; Page 130; 153pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   c-jun antisense oligonucleotide.
                 07-SEP-2001; 2001US-031B120P-
19-SEP-2001; 2001US-0323513P-
16-MAX-2002; 2002US-0381035P-
6-SEP-2002; 2002US-00236104,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ83292 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   775 CTGAGGGCAGCC 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100.
Les 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGAGGGCAGCC
                                                                                                                                                                                                            Zhong M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   phosphorothioate; ss
                                                                                                                         (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                    WPI; 2003-354532/33.
                                                                                                                                                                  Alsobrook JP,
                                                                                                                                                                                           Patturajan M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  W09502051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2003
19-SEP-1995
                                                                                                                                                                                                            Taupier RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ83292;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ83292,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                          Use of antisense c-jun, c-fos or jun-B nucleic acids - for preventing and treating neuronal injury, degeneration, cell death and/or neoplasms.
                                                                                                                                                                                                                                                                             comprising the genes c-jun, jun-B or c-fos, expression of which plays a causal role in neuronal injury, degeneration, cell death and/ or neuronal injury, degeneration, cell death and/ or antisense sequences are described in AAQ83327-321 and AAQ83440-43; jun-B antisense sequences are described in AAQ83322-63 and AAQ83444-45; and c-fos antisense sequences are described in AAQ83364-439 and AAQ8346-51. Preferably the antisense sequences are phosphorothioate oligonucleotides since these are not destroyed as fast by endogenous factors as naturally occuring molecules. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                  Antisense nucleic acid hybridising with an area of the mRNA and/or DNA
                                                                                                                                 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                   Brysch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                   Schlingensiepen K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human stromelysin hairpin target sequence SEQ ID NO:1040.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 12; DB 1; Length 18;
100.0%; Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 1 A; 3 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                     (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                 Schlingensiepen R,
                                                                                                                                                                                                                                       Claim 2; Page 28; 86pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94US-00354920.
94US-00363253.
94US-00363254.
95US-00390850.
95US-00432874.
95US-000351P.
95US-0000951P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX64408 standard; RNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95WO-US015516
                                          94WO-EP002218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            920 CATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATCACCACCAC 1
                                                                                                                                                               WPI; 1995-066896/09.
                                                                                                                                   Schlingensiepen G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-FEB-1995;
20-APR-1995;
02-MAY-1995;
04-MAY-1995;
07-JUL-1995;
07-JUL-1995;
                                          16-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9618736-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23-DEC-1994;
               19-JAN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX64408;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX64408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT
쉽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
```

0;

Gaps

0;

4.1%; Score 12; DB 1; Length 17; 100.0%; Pred. No. 5.9e+02; ive 0; Mismatches 0; Indels

BP

4

WPI; 1999-571296/48.

Coswert LM;

```
The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising; (i) at least 5 ribose residues; (ii) a 2-C-allyl modification at position 4 of the ENA; (iii) at least ten 2'-c0—altyl modification at position 4 of the ENA; (iii) at least ten 2'-c0—acthyl modifications; and (iv) a 3'-end modification. The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, particularly osteoarthritis or rheumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used for charance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of stromelysin without introducing the non-specific effects upon gene cypression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment is lover than that required of antisense molecules, and is highly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human, RhoB protein, antisense oligonucleotide, disease, RhoB expression, breast cancer, primer; phosphorothioate, ss.
                                                                                                                                                                                               Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence is used in the exemplification of the
                                                                                        , Pavco P;
Matulic-Adamic J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Antisense oligonucleotide directed against human RhoB mRNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 12; DB 1; Length 18;
100.0%; Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Indels
                                                                                      , Jarvis T, Draper K,
Usman N, Wincott F, M
Modak A, Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 7 A; 5 C; 2 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100.0%; Pred. No. b.s.
                                                                                                                                                                                                                                                                    Example 1; Page 164; 307pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
              95US-00541365.
95US-00512861.
                                                                                        ĎĪ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-00156979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-001.56979.
                                                    (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ22406 standard; DNA; 18
                                                                                      Stinchcomb D.
Gustofson J,
                                                                                                                         Thompson JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          974 AAATCTGGTGTA 985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12 AAArcregrera 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                auto-immune diseases.
                                                                                                                                                           WPI; 1996-300653/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                    Beigelman L,
Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-SEP-1998;
07~AUG-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-SEP-1998;
                  05-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US5962672-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               specific.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAZ22406;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAZ22406
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dd
```

```
This invention relates to an antisense compound targeted to a nucleic acid molecule encoding a member of the human Rho family of small GTP binding proteins, where the antisense compound inhibits the expression of the member of the human Rho family. The invention includes antisense oligonucleotides AAF94580 - AAF94637 which target a RhoA nucleotide sequence, AAF9465 - AAF94654 which target a RhoB nucleotide sequence, AAF94725 which target a Rho nucleotide sequence, AAF9475 which target a Rho nucleotide sequence, AAF94770 - AAF94765 which target a Rac I nucleotide sequence and AAF94765 - AAF94809 which target cafe a Rac I nucleotide sequence and AAF94765 - AAF94809 which target cafe 2 nucleotide sequence and AAF94765 - AAF94809 which target cafe 2 nucleotide sequence and AAF94765 - AAF94809 which target cafe 2 nucleotide sequence and AAF94765 - AAF94809 which target cafe 2 nucleotide sequence and AAF94765 - AAF94809 which target cafe 2 nucleotide sequence and AAF94765 - AAF94809 which target cafe 2 nucleotide sequence and AAF94767 - AAF94809 which target cafe 3 nucleotide sequence and AAF94767 - AAF94809 which target cafe 3 nucleotide sequence and AAF94767 - AAF94809 which target cafe 3 nucleotide sequence 3 nucleotide 3 nucleotide sequence 3 nucleotide 3 nuc
                                                                                                                                                                                                                                                                                              nucleotides in length, and are targeted to the gene encoding human RhoB. The antisense oligonucleotides may be useful for treating diseases associated with the expression of RhoB, such as breast cancer. They may
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       An antisense compound targeted to a nucleic acid molecule encoding a member of the human Rho family of small GTP binding proteins useful for treating e.g. cancer and ischemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rho; GTP binding protein; phosphorothioate antisense oligonucleotide; RhoA; RhoB; RhoC; RhoG; Rac 1; cdc42; hyperproliferative condition; cancer; wound healing; clotting; ischaemia; reperfusion; reoxygenation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                        AAZ22392-Z22431 represent antisense oligonuclectides, which are 8-30
                                                                                                                 Antisense inhibition of the gene encoding RhoB, useful for treating diseases associated with RhoB expression e.g. breast cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rho B antisense phosphorothioate oligonucleotide SEQ ID 83.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%; Score 12; DB 1; Length 18;
100.0%; Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                also have research and diagnostic applications
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 13; Page 64; 156pp; English.
                                                                                                                                                                                                               Example 15; Col 27; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF94659 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00387341.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-AUG-2000; 2000WO-US022808.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     703 ICCAGCGAGICC 714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7 TCCAGCGAGTCC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             member of the human Rho
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-191677/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200115739-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Roberts ML,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF94659;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF94659
à
```

0;

Gaps

.,

0;

0

```
enables the construction of a scent representation (also called a scent fingerprint or scent profile), which may be used to re-create and edit scents. Libraries of olfactory receptors are useful for determining the interaction pattern of a composition with the receptors, and can be used for determining differences in the olfactory faculties of different individuals. The present sequence is homologous to a conserved region in transmembrane segment 2 (TM2) of G-protein coupled receptors. It was used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present sequence is provided in a specification relating to isolated polymucleotides which encode polypeptides involved in olfactory sensation. The polymucleotides can be used in screening for olfactory agonists and antagonists. The methods allow for the determination of primary scents and the identification of the odour receptors used to detect these primary scents. The methods also enable determination of secondary scents and the identification of combinations of odour receptors that are involved in detecting such secondary scents. This
hyperproliferative conditions, especially cancer, abnormal wound healing or clotting conditions and ischaemia/reperfusion or reoxygenation injury. The compound may also be used to diagnose the above conditions
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   scent profile; scent fingerprint; scent representation; PCR primer; ss.
                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; olfactory receptor; OR; G protein-coupled receptor; GPCR; transmembrane segment 2; TM2; primary scent determination; secondary scent determination; polypeptide library; odour receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New polynucleotides which encode polypeptides involved in olfactory sensation for identifying olfactory agonists and antagonists.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Yanai I;
                                                                                                                                                         ö
                                                                                                                   Score 12; DB 1; Length 18;
Pred. No. 6.3e+02;
                                                                                                                                                         0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fuchs T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                transmembrane segment 2 (TM2) of G-protein coupled in the isolation of human olfactory receptor cDNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18 BP; 2 A; 5 C; 1 G; 7 T; 0 U; 3 Other;
                                                                            Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Glusman G,
                                                                                          Query Match
4.1%; Score 12; DB.
Best Local Similarity 100.0%; Pred. No. 6.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human GPCR TM2 primer, SEQ ID NO: 83.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 43; 1857pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lancet D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (DIGI-) DIGISCENTS.
(YEDA ) YEDA RES & DEV CO LTD.
                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-OCT-2000; 2000WO-US027582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000US-0184809P
                                                                                                                                                                                                                                                                                                                                   AAH31511 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                             703 TCCAGCGAGTCC 714
                                                                                                                                                                                                                                    TCCAGCGAGTCC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Smith D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-290713/30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200127158-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bellenson J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-OCT-1999;
24-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                30-JUL-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-APR-2001.
                                                                                                                                                                                                                                    7
                                                                                                                                                                                                                                                                                                                                                                         AAH31511;
                                                                                                                                                                                                                                                                                            RESULT 641
                                                                                                                                                                                                                                                                                                                   AAH3151
```

4.1%; Score 12; DB 1; Length 18;

Query Match

```
This invention describes a novel oligonucleotide which hybridises with and detects a nucleic acid from a filamentous bacteria cell. The filamentous bacteria cell. The filamentous bacteria call. The filamentous bacteria can include members of the 021N Kanagawa group I. II ozili, 021N-like from BIO33 BUZI, Alisphaera europaea EU24 Nostocoida limicola-like, Alisphaera (europaea, PPx3, MC2), Alisphaera MC2 MACOBS-Clone 2 (BIO 36), Bactothrix amylovca (EU3, EU9, EU9, EU1), Chloroflexus aurantiacus, Curtrema variabilis (type 0041), Cytophaga, EPTS Australian 021N isolate (EU21), EPTS Australian isolate EU33 from Megathrix sidereus EU26 Nostocoida/O21N-like, M. tenacis (WU12, EU5, EU6, EU15, EU15, EU13, EU14 EU1, EU1, EU12), Nostocoida limicolasne (EU24), Nostocoida limicolasne (EU24), Nostocoida limicolasne (EU24), EU15, EU13 EU14 EU1, EU10, EU2), Nostocoida limicolasne (EU24), Chiothrix ramose, Type O411 (CF) and Type 0403. When detecting filamenteus bacteria the oligonucleotide is preferably coupled with a filorancear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     fluorescent, chemiluminescent, radioactive, enzymatic or hapten marker. Detection is by epiflourescence microscopy or flow cytometry. The invention is used to detect filamentous bacteria in a sample, particularly in activated sludge. ADA83682-ADA83723 represent oligonucleotide probes used in the detection method of the invention.
                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New oligonucleotides are useful to detect filamentous bacteria in samples, particularly in activated sludge.
                                                                                                                                                                                                                                                                                                                                ss; probe; hybridisation; detection; filamentous bacteria cell; activated sludge.
                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 12; DB 1; Length 18;
100.0%; Pred. No. 6.3e+02;
                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                Filament forming bacteria detecting probe SEQ ID 12.
     80.0%; Pred. No. 6.3e+02; ive 1; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 BP; 3 A; 9 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%; Prec. ...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 24; 26pp; German.
                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12-JUN-2001; 2001DE-01028400.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-JUN-2001; 2001DE-01028400.
                                                          899
                                                                                        4 ATGTAYTINCTICTC 18
                                                                                                                                                                                    ADA83693 standard; DNA; 18
                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              765 GCCTCCACTTCT 776
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                      Conservative
                                                          885 ATGCACTTACTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCTCCACTICT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Snaidr J, Beimfohr C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-314735/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (VERM-) VERMICON AG.
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
nes 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                      Chloroflexaceae.
                                                                                                                                                                                                                                                                                                                                                                                                                          DE10128400-A1.
                                                                                                                                                                                                                                                          20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-DEC-2002
                                                                                                                                                                                                                        ADA83693;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loca
Matches
                                                                                                                                                 RESULT 642
                                                                                                                                                                     ADA83693
                                                                                                                                                                                      g
                                                                                          임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                          8
```

Synthetic.

```
·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel method for producing a food containing gamma-glutamyl cysteine or cysteine comprising culturing under appropriate conditions Candida utilis (Pichia jadini) containing 1% or more by weight of gamma-glutamyl cysteine based on dry cells in the logarithmic growth phase when cultured in the minimum medium, adding the obtained culture, optionally after heating, to a food or drink material and processing. The yeast of the invention may be used for producing food and drink with enriched gamma-glutamyl cysteine or cysteine which is can be cheaply produced with improved flavour. The current sequence is that of the food enrichment-related PCR primer of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Transcription; inhibition; duplex; anti-sense therapy; RNA; polymerase;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                gamma-glutamyl cysteine; drink; seasoning; flavour improvement;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Genetically-modified Candida utilis for producing foods and drinks enriched with gamma-glutamyl cysteine or cysteine, useful in food industry e.g. for seasoning, by culturing and processing to enhance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 12; DB 1; Length 18; 85.7%; Pred. No. 6.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 3 A; 7 C; 2 G; 5 T; 0 U; 1 Other;
                                                                                                                       Food enrichment-related PCR primer - SEQ ID 11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; SEQ ID NO 11; 70pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                Kuroda M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ODN2 - control oligonucleotide.
                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ25292 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                       26-MAR-2003; 2003WO-JP003715
                                                                                                                                                                                                                                                                                                                     26-MAR-2002; 2002JP-00085058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         922 TCACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                Nishiuchi H, Nishimura Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTACCACCACCYTC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (revised)
(first entry)
                            ADD69531 standard; DNA; 18
                                                                                       15-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12; Conservative
                                                                                                                                                                                                                                                                                                                                                  (AJIN ) AJINOMOTO CO INC.
                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-833508/77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                     PCR; primer; ss.
                                                                                                                                                                                                                              WO2003080832-A1.
                                                                                                                                                                                                Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAR-2003
23-DEC-1992
                                                                                                                                                                                                                                                          02-OCT-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAQ25292;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                            ADD69531;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 644
                                                                                                                                                     food;
RESULT 643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ25292,
                 ADD69531
                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
```

```
The oligomer is used as a control oligonucleotide for studying inhibition of transcription of duplex DNA. Similar oligomers are capable of binding to the transcribed region of the DNA so as to form a triple helix. This interaction is compared to the binding of the control oligonucleotide to give accurate results. The target region may lie within an exon or an intron and the oligomer forms a triple helix by expliciting the GT motif (i.e. the oligomer is purine rich). The oligomer is useful in antisense therapy. It can also be used (opt. in labelled form) diagnostically to detect target DNA or RNA by hybridisation. See also AAQ25290-300. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                       Inhibiting transcription of duplex DNA in anti-sense therapy and diagnosis - by contacting the transcribed region of DNA with an oligomer to form triple helix.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New DNA sequences as DNA probes - for use in paternity and maternity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 0 A; 0 C; 9 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  M13; consensus; hypervariable region; HVR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Probe (17) for DNA fingerprint analysis.
                                                                                                                                                                                                                                                                                Table 1; Page 26; 45pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hodes MZ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAQ22457 standard; DNA; 15 BP.
                                                                                  91WO-US009321.
                                                                                                             90US-00625680.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89US-00411823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  918 ATCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89US-00411823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15 AACACCACCACCACC
                                                                                                                                          (GILE-) GILEAD SCI INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Norris FH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1992-113708/14
                                                                                                                                                                                              WPI; 1992-234645/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HODE/) HODES M E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-SEP~1989;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-SEP-1989;
                            WO9210590-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-AUG-1992
                                                                                 10-DEC-1991;
                                                                                                             10-DEC-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US5097024-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-MAR-1992
                                                      25-JUN-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ22457;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hodes ME,
                                                                                                                                                                      Toole JJ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 645
AAQ22457/c
qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
```

0;

```
°;
                                                                  The DNA probes represented in AAQ22441-76 are 15 nucleotide sequences wherein 8 nucleotides of each sequence are G, 3 are T, 1 is C, 1 is A and 2 are N, except that the nucleotide sequence is not the M13 consensus sequence GAGGGTGGNGGANTC. The probes can detect hyper-variable regions (HVRs) in genomic DNA with such precision as to enable individuals to be identified or fingerprinted by reference to variations in their DNA in these regions. The DNA probes can be used in paternity and maternity testing, zygosity testing in twins, cell chimerism studies, e.g. detection of donor versus recipient cells after bone marrow transplantation, forensic medicine, family gp. verification, tests for inbreeding, pedigree analysis, identification of loci or genetic diseases, animal or plant breeding and pedigree analysis authentication, duality control of cell lines and analysis. Preparation: The M13 sequence was initially randomised manually by the method of random sampling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                  without replacement to produce random sequences. Later a computer programme was written that implemented an algorithm that produced a random sequence by sampling thout replacement. Several of the rand sequences that were obtd. were synthesised, labelled and used as DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse relA hammerhead ribozyme target sequence (nt. position 1681).
testing, analysis of tumour cells, animal or plant breeding, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 2 A; 1 C; 9 G; 3 T; 0 U; 0 Other;
                                      Claim 1; Page 13; 13pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94US-00218934.
94US-0022795.
94US-00224483.
94US-00227958.
94US-00228041.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95WO-IB000156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94US-00201109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15 TTACCACCACCGCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT54975 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 86.7
ses 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-MAR-1994;
04-APR-1994;
07-APR-1994;
15-APR-1994;
15-APR-1994;
18-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9523225-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-FEB-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAT54975;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT5497
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Db
```

```
The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the nucleotide base position indicated in the DE line. The relA gene product is a subunit of the transcriptional regulator NF-kappaB and is implicated specifically in the induction of inflammatory responses. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes are designed to cleave the target sequences and thereby inhibit relA expression, making them potentially useful for treating rheumatoid arthritis, restenosis and asthma as well as for increasing tolerance to transplanted tissues. The potential immunosuppressive properties of a ribozyme that cleaves relA mRNA means that uses are limited to local delivery, acute indications or ex vivo
                                                                                                                                                                                                                                                                                                                                                         o DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Belgeman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human ICAM hammerhead ribozyme target sequence (nt. position 1500).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 15; 66.7%; Pred. No. 5.5e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        treatment. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 4 A; 6 C; 1 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 2; Page 226; 407pp; English.
           94US-00291433.
94US-00291433.
94US-00293520.
94US-00300000.
94US-003111486.
94US-00311749.
94US-00311749.
94US-00316771.
94US-00316771.
94US-00316847.
94US-00321993.
94US-00345516.
94US-00345516.
94US-00345516.
94US-00345518.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        798 AAGAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT51902 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 66.7
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1995-351090/45.
                                                                                                                                                                                                                                                                                                                                                           Stinchcomb DT,
                                                           19-AUG-1994;
02-SEP-1994;
08-SEP-1994;
23-SEP-1994;
                                                 1994;
                                                                                                                               23-SEP-1994;
                                                                                                                                           28-SEP-1994;
03-OCT-1994;
                                                                                                                                                                            07-0CT-1994;
                                                                                                                                                                                                                           10-NOV-1994;
                                                                                                                                                                                                                                                                                            30-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
09-MAR-1997
                                                                                                                                                                                           11-OCT-1994
04-NOV-1994
                                                                                                                                                                                                                                                             16-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                            Grimm S,
Modak A,
Tracz D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT51902;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                               17-AUG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAT51902
AXXXEEXEX
XEXEEXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
```

ö

Sequence 15 BP; 5 A; 2 C; 3 G; 0 T; 5 U; 0 Other;

cleavage; inhibition;

gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; intercellular adhesion molecule; rel A; tumour necrosis factor; interacellular adhesion molecule; rel A; tumour necrosis factor; translocation; chepitatory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HVV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS; trans nucleic acid; ribozyme; 94US-00291433. 94US-00292620. 94US-00293520. 94US-00300000. 94US-00311486. 94US-00311749. 94US-00314397. 94US-00316771. 94US-00222795. 94US-00224483. 94US-00227958. 94US-00228041. 94US-00319492. 94US-00321993. 94US-00334847. 94US-00337608. 94US-00271280. 94US-00291932. 94US-00245736. 94US-00345516. 95WO-IB000156 94US-00357577 94US-00363233. 15-APR-1994; 18-MAY-1994; 06-JUL-1994; 15-AUG-1994; 16-AUG-1994; 17-AUG-1994; Homo sapiens. WO9523225-A2 16-DEC-1994; 23-DEC-1994; 23-FEB-1995; 19-AUG-1994; 08-SEP-1994; 23-SEP-1994; 23-SEP-1994; 28-SEP-1994; 03-OCT-1994; 07-OCT-1994; 11-OCT-1994; 30-JAN-1995; 15-APR-1994 04-NOV-1994 10-NOV-1994 28-NOV-1994 31-AUG-1995 04-APR-1994 07-APR-1994 Enzymatic 

## (RIBO-) RIBOZYME PHARM INC.

o DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T; Stinchcomb DT, Grimm S, Modak A, Tracz D,

## WPI; 1995-351090/45.

Ribozymes having modified bases and methods for producing them - for use inhibiting disease related genes. 므

## Claim 2; Page 173; 407pp; English

The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA. Regions of the mRNA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatoid arthritis, asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to correct PI field.)

Stinchcomb DT,

Grimm S,

```
ö
                                                                                                                                                                                                                               Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; TNF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chromic myelogeneus leukaemia; CML; cancer; Philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     th DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
                                                                                                                                                                                                           Human ICAM hammerhead ribozyme target sequence (nt. position 1503).
                         .,
  Length 15;
                        Indels
                         2;
Score 11.8; DB 1;
Pred. No. 5.5e+02;
5; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94US-00218934.
94US-0022795.
94US-00227958.
94US-0022736.
94US-00245736.
94US-00291332.
94US-00291332.
94US-00291433.
94US-00291433.
94US-00291433.
94US-00311486.
94US-00311486.
94US-00311486.
94US-00311486.
94US-00311486.
94US-00311489.
94US-00311489.
94US-00311489.
94US-00311489.
                                                                                                                              AAT51904 standard; RNA; 15 BP
4.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                             95WO-IB000156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94US-00201109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94US-00363233
                                                910 ATCAGATTATCATCA 924
                                                             |: |||:: :||:||
1 AUGAGAUUGUCAUCA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                      (first entry)
                         8; Conservative
                                                                                                                                                                          (revised)
 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                WO9523225-A2.
                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-AUG-1994;
16-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-AUG-1994;
19-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                             23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          32-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-0CT-1994;
11-0CT-1994;
                                                                                                                                                                          25-MAR-2003
09-MAR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                       31-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .5-APR-1994
                                                                                                                                                     AAT51904;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-SEP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-SEP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-SEP-
                                                                                                        RESULT 648
                         Matches
                                                                                                                     AAT51904
                                                                                                                               δ
                                                                    g
```

```
;
0
                                                                                                                                                                                                                                                                                         The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA. Regions of the mENA that do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with on 25-MAR-2003 to correct PI field.)
Thompson JD;
                                                                                                                                              Ribozymes having modified bases and methods for producing them - for use in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Enzymatic nucleic acid; ribozyme; trans cleavage; inhibition; gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; INF-alpha; respiratory syncytial virus RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atheroselerosis; myocardial infarction; stroke; restenosis; transplant rejection; rheumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human relA hammerhead ribozyme target sequence (nt. position 1681).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
Sweedler D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 15; 0.0%; Pred. No. 5.5e+02; ve 4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 5 A; 3 C; 2 G; 0 T; 5 U; 0 Other;
Sullivan SM,
Woolf T;
                                                                                                                                                                                                                                    Claim 2; Page 173; 407pp; English.
Beigleman L,
                              Wincott FE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94US-00224483
94US-00227958.
94US-00228041.
94US-00245736.
94US-00271280.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94US-00218934.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95WO-IB000156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94US-00201109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       913 AGATTATCATCACCA 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           94US-00291932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAT55164 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (revised)
Pavco P,
Usman N,
                                                                                   WPI; 1995-351090/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9523225-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-FEB-1994;
29-MAR-1994;
04-APR-1994;
07-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15-APR-1994;
15-APR-1994;
18-MAY-1994;
06-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 22-APR-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAT55164;
Modak A,
Tracz D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATS5164
AATS5164
AATS5164
AATS5164
AATS5164
AATS5164
AATS5764
AAT
ò
```

```
The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves relA mRNA at the nucleotide base position indicated in the DE line. The relA gene product is a subunit of the transcriptionallator NF-kappaB and is implicated specifically in the induction of inflammatory responses. Regions of the mRNA that do not form secondary folding structures and that contain
                                                                                                                                                                                                                                                                                                                                    b DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Karpelsky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
Usman N, Wincott FE, Woolf T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes designed to cleave the target sequences and thereby inhibit relA expression, making them potentially useful for treating rheumatoid arthritis, restenosis and asthma as well as for increasing tolerance to transplanted tissues. The potential immunosuppressive properties of a ribozyme that cleaves relA mRNA means that uses are limited to local delivery, acute indications or ex vivo treatment. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ribozymes having modified bases and methods for producing them - for use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 15; 56.7%; Pred. No. 5.5e+02; ive 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2788.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 4 A; 6 C; 1 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             in inhibiting disease related genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 2; Page 229; 407pp; English.
          94US-00292620.
94US-0029320.
94US-00300000.
94US-00311486.
94US-0031149.
94US-00318771.
94US-0031842.
94US-0031942.
94US-0031942.
94US-00321993.
94US-00351516.
94US-0035777.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 66.7%;
Matches 10; Conservative
                                                                                                                                                                                                                                                                      95US-00380734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          798 AAGAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 AAGACUUCUCCUCCA 15
                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX66156 standard; RNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1995-351090/45.
                                                                                                                                                                                                                                                                                                                                        Stinchcomb DT,
                                                                                                                                                   994;
                                                                                                                                                                                                   10-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-JUL-1999
                                                              08-SEP-1994;
                                                                                                                 28-SEP-1994,
                                                                                                                                                                   11-0CT-1994
                                                                                                                                                                                                                                   16-DEC-1994
                                                                                               23-SEP-1994
                                                                                                                                                                                   04-NOV-1994
                                                                                                                                                                                                                    28-NOV-1994
                                                                                                                                                                                                                                                                                                                                                          Grimm S,
Modak A,
Tracz D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX66156;
                                                                                                                              03-OCT-1
                                                                                                                                                     07-OCT-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX66156/
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

6

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising; (i) at least 5 ribose residues (ii) a 2-C-allyl modification at position 4 of the ENA; (iii) at least ten 2'-O-methyl modification, and (iv) a 3'-end modification. The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis, particularly osteoarthritis or rheumatoid arthritis. The ENA's can also be used to treat antigen presenting cells of a donor to induce tolerance in a recipient to an alloantigen of a donor. They can also be used for enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  stronglysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment of
auto-immune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                 Matulic-Adamic J;
rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                    Pavco P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                  T, Draper K,
Wincott F, Ma
Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 3 A; 4 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                 Usman N,
Modak A,
                                                                                                                                                                                                                                                                                                                                                                                                    Jarvis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 10; Page 196; 307pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX66155 standard; RNA; 15 BP.
                                                                                                                                                                                           94US-00363253.
94US-00363254.
95US-00390850.
                                                                                                                                                                                                                                        95US-00426124.
95US-00432874.
95US-00434509.
                                                                                                                                                                                                                                                                                      95US-0000951P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCTTCTGCGATCAG 914
                                                                                                                                             95WO-US015516
                                                                                                                                                                            94US-00354920
                                                                                                                                                                                                                                                                                                                                     95US-00541365
                                                                                                                                                                                                                                                                                                                                                                                                    Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                      95US-00512861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCATCTGAGATCAG 1
                                                                                                                                                                                                                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                    Gustofson J,
Thompson JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1996-300653/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present invention
                                                                                                                                                                                                                                                                                                                                                                                                  Beigelman L,
Mcswiggen J,
Karpeisky A,
                                                                                 WO9618736-A2
                                                                                                                                             22-NOV-1995;
                                                                                                                                                                                                                                                                                                         07-JUL-1995;
                                                                                                                                                                                                                                                                                                                                        05-OCT-1995;
                                                                                                                20-JUN-1996.
                                                                                                                                                                                                            23-DEC-1994;
                                                                                                                                                                                                                                         20-APR-1995
                                                                                                                                                                                                                                                                           04-MAY-1995,
                                                                                                                                                                                                                                                                                        07-JUL-1995
                                                                                                                                                                                                                                                                                                                         07-AUG-1995
                                                                                                                                                                                                                            17-FEB-1995
                   diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX66155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                 Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX66155,
   SAXB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues (i) (ii) a 2-C-allyl modification at position 4 of the ENA; (iii) at least ten 2-O-methyl modifications, and (iv) a 3'-end modification. The ENA's can inhibit collagenase and stromelysin production in the synovial membrane of joints for the treatment or prevention of arthritis. The ENA's can be used to treat antigen presenting cells of a donor to induce tolerance be used to treat antigen presenting cells of a donor to induce tolerance enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also allergies and other inflammatory conditions.
                                                             Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbli; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         οĘ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           stromelysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pavco P;
Matulic-Adamic J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               be used in diagnosis. Ribozyme therapy impacts on the expression of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; ve 0; Mismatches 2; Indels
                             Mouse B7-2 hammerhead ribozyme target SEQ ID NO:2787.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Jarvis I, Draper K,
sman N, Wincott F, M
odak A, Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 3 A; 4 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ymb ...
Stinchcomb DT, Jarv...
Stinchcomb DT, Jarv...
Cistofson J, Usman N, Water A, Modak A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 10; Page 196; 307pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                       95US-0000951P.
95US-0000974P.
95US-00512861.
                                                                                                                                                                                                                                                                                                                    94US-00363253.
94US-00363254.
                                                                                                                                                                                                                                                                                                                                                      95US-00390850.
                                                                                                                                                                                                                                                                                                                                                                      95US-00426124.
95US-00432874.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95US-00541365.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900 AGCTTCTGCGATCAG 914
                                                                                                                                                                                                                                                                     95WO-US015516
                                                                                                                                                                                                                                                                                                     94US-00354920
                                                                                                                                                                                                                                                                                                                                                                                                       95US-00434509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCATCTGAGATCAG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              auto-immune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1996-300653/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
les 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Beigelman L,
Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                      WO9618736-A2.
                                                                                                                                                                                                                                                                       22-NOV-1995;
                                                                                                                                                                                                                                                                                                                        23-DEC-1994;
23-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                      17-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                       20-APR-1995;
02-MAY-1995;
20-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                       04-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-OCT-1995;
                                                                                                                                                                                                                                     20-JUN-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen (
Karpeisky
                                                                                                                                     diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                        Wus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
Rabbit CETP HH ribozyme target sequence #1107.
    AAT50303 standard; RNA; 15 BP.
            (first entry)
                     Hammerhead ribozyme;
            11-MAR-1997
        AAT50303;
                                 LDL; ss.
RESULT 652
```

neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy, reverse cholesterol transport; high density lipoprotein; therapy; CETP; familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoprofeinaemia; peripheral vascular disease, hyperbetalipoproteinaemia; RCT; inhibitor; angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit; cholesterol ester transfer protein; mRNA cleavage;

Oryctolagus cuniculus.

WO9620279-A1

04-JUL-1996

95WO-US016000. 11-DEC-1995; 94US-00363240. 23-DEC-1994;

(RIBO-) RIBOZYME PHARM INC. (WARN ) WARNER LAMBERT CO.

Pape M; Bisgaier C, Stinchcomb D, Mcswiggen J, Couture L,

WPI; 1996-321852/32.

New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia.

Claim 4; Page 42; 72pp; English.

Table transfer protein (CETP) harmerhead (HH) ribozymes (see AAT50360-150546). CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the position of the cleavage site in full length CETP. The ribozyme then binds to 5 nucleotides either side of this site. The ribozyme able to cleave mRNA from the gene encoding CETP, thereby blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse cholesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density lipoproteins (HDL), prolonging HDL half life, and therefore increasing HDL levels. The ribozymes can be used to treat conditions associated with hypercholesteroleamia, peripheral vascular disease, dyslipidaemia, decrease in LDL levels, and a corresponding increase in HDL levels). The HH ribozymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes AAT50138-T50359 represent target sequences for the rabbit cholesterol target specific regions of the CETP gene, they have low non-specific hyperbetalipoproteinaemia, hypoalphalipoproteinaemia, vascular complications of diabetes, transplant, atherectomy and angioplastic restenosis. By inhibiting CETP, the levels of HDL and low density lipoproteins (LDL), and the HDL:LDL ratio are favourably altered (a

Sequence 15 BP; 6 A; 4 C; 2 G; 0 T; 3 U; 0 Other;

```
Gaps
                                       0
Query Match 4.1%; Score 11.8; DB 1; Length 15; Best Local Similarity 66.7%; Pred. No. 5.5e+02;
                                     Indels
                                   3; Mismatches
                                   10; Conservative
                                   Matches
```

ö

| :|:||:|||| 1 AGGAUAUCAUCACCA 15

```
RESULT 653
            AAT5034
```

AAT50341 standard; RNA; 15

AAT50341;

(first entry) 11-MAR-1997

Rabbit CETP HH ribozyme target sequence #1828.

Hammerhead ribozyme; cholesterol ester transfer protein; mRNA cleavage; neutral lipid transfer; plasma lipoprotein; atherosclerosis; atherectomy; reverse cholesterol transport; high density lipoprotein; therapy; CETP; familial hypercholesterolaemia; dyslipidaemia; hypoalphalipoproteinaemia; peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor; angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit; LDL; ss.

Oryctolagus cuniculus.

WO9620279-A1.

04-JUL-1996

95WO-US016000. 11-DEC-1995;

94US-00363240. 23-DEC-1994;

INC. RIBOZYME PHARM (WARN ) WARNER LAMBERT (RIBO-)

Bisgaier C, Mcswiggen J, Stinchcomb D, Couture L,

WPI; 1996-321852/32.

useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia. New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA

Claim 4; Page 43; 72pp; English.

AAT50138-T50359 represent target sequences for the rabbit cholesterol ester transfer protein (CETP) hammerhead (HH) ribozymes (see AAT50360-750564). CETP is a 74 kD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the position of the cleavage site in full length CETP. The ribozyme are concluded to a nucleotides either side of this site. The ribozymes are able to cleave mRNA from the gene encoding CETP, thereby blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the reverse collesterol transport (RCT) pathway can be inhibited (or eliminated) thereby preventing the reduction in size density of the high density conclusions (HDL), prolonging HDL half life, and therefore increasing the libororeins (HDL), prolonging HDL half life, and therefore increasing abnormal levels of CETP, specifically atherosclerosis, familial chypercholesterolaemia, peripheral vascular disease, dyslipidaemia, hypoalphalipoproteinaemia, vascular complications of diabetes, transplant, atherectory and angioplastic restenosis. By inhibiting CETP, the levels of HDL and low density createnosis. By inhibiting CETP, the levels of HDL and low density createnosis. By inhibiting CETP, the levels of HDL and low density createnosis. By inhibiting CETP, the levels of HDL and levels). The CHT reloxymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the HH ribozymes continic arribes in the CETP gene, they have low non-specific 

Sequence 15 BP; 0 A; 5 C; 3 G; 0 T; 7 U; 0 Other;

Length 15; Score 11.8; DB 1; Pred. No. 5.5e+02; 4.1%; Query Match Best Local Similarity

913 AGATTATCATCACCA 927

.. 0

RESULT 654

AAV48734

Matches

à

```
The present invention describes a branched composition (I) which is useful for improving the solubility of synthetic polymers (II) or aids in minimizing or eliminating self-aggregation of (II), where (II) is a nucleic acid (or analogue), peptide, peptide nucleic acid (PNA), polyamide, chimera or a linked polymer. Modification of (II) by (I) can facilitate synthesis, purification and analysis of many insoluble polymers, and particularly purine-rich PNA polymers labeled with hydrophobic labels. The products can be used in research, diagnostic and therapeutic applications. The present sequence represents a PNA used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Branched compositions for improving the solubility of synthetic polymers or minimizing or eliminating polymer self-aggregation, particularly in peptide nucleic acids.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /*tag= a /*tag= a //note= "g is modified to Flu-OE-g where Flu is 5-(6)-carboxyfluorescein, O is 8-amino-3,6-dioxaoctanoic acid and E is an uncharged ether modifying moiety"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /*tag= b /note= "t is modified to t-E-NH2, which is an amidated uncharged ether modifying moiety"
                                                                                                                                                                                                                                                                                            Peptide nucleic acid; PNA; polymer; solubility; modulation; synthesis; purification; analysis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 12; Page 40; 81pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                      Peptide nucleic acid oligomer #3.
                                                                                           AAZ07073 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0072772P.
99US-00225048.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  918 ATCATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US001024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15 Accaccaccaccacc 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BOST-) BOSTON PROBES INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Coull JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-479032/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                               Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             04-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         W09937670-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19-JAN-1999;
                                                                                                                                                                                                    07-0CT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gildea BD,
                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                               AAZ07073;
                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAV48709-886 represent antisense oligomucleotides directed against the ErbB-2 gene. Of these, only oligomucleotides AAV48709-91 resulted in significant redcution in ErbB-2 protein expression, while significant redcution in ErbB-2 protein expression, while oligomucleotides AAV48792-886 had little effect. The oligomucleotides aAV48792-886 had little effect. The oligomucleotides can each form three hydrogen bonds to cytosine; do not contain four consecutive nucleotides able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive nucleotides each able to form three H-bonds to three consecutive nucleotides each able to form three H-bonds to three consecutive cytosines, and the ratio between residues able to form two H-bonds each configuration of genes for Erb 2013 given by 2R/3R = 0.33-0.72. The coligomucleotides are used to modulate expression of genes, particularly proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The coligomucleotides can also be used to analyse function of proteins (by coligomucleotides can also be used to analyse function of proteins (by coligomucleotides can also be used to analyse function of proteins (by coligomucleotides can also be used to analyse function of proteins (coligomucleotides can also be used to analyse function of proteins (coligomucleotides can also be used to analyse function of proteins (coligomucleotides can also be used to analyse function of proteins (coligomucleotides can also be used to analyse function of proteins (coligomucleotides can also be used to analyse function of proteins (coligomucleotides can also be used to analyse demonstration of proteins (coligomucleotides can also be used to analyse demonstration of proteins (coligomucleotides can also be used to analyse of also coligomucleotides can also be used to analyse of coligomucleotides can also be coligomucleotides can also be coligomucleotides can also coligomucleotides can al
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              activity) and therapeutically, e.g. in cases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guanosine or inosine - and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ErbB-2; antisense oligonucleotide; modulate; gene expression; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for stimulating the immune system
.;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 15; 6.7%; Pred. No. 5.5e+02; ve 0; Mismatches 2; Indels
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 2 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                                                                                                                                                                                                                                                                                                                                ErbB-2 gene antisense oligonucleotide ErbB-2-26.
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 10; Fig 6a; 286pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
  7;
                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Schlingensiepen K, Brysch W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   766 CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97EP-00101531.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97EP-00101531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              altering their expression or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cancer or (targeting TGF)
                                                 822 TGGCTGTGTCTTT 836
                                                                                   1 UGGCUGUCCUCUCU 15
                                                                                                                                                                                                                                           AAV48734 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 86.75
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                 15-OCT-1998 (first entry)
     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-400910/35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EP856579-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 05-AUG-1998
        9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                  AAV48734;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             culture
```

ó Gaps 0 4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; tive 0; Mismatches 2; Indels Sequence 15 BP; 0 A; 0 C; 10 G; 5 T; 0 U; 0 Other; RESULT 656 AAZ64437/c

1 cerécréricadade 15

ð Dp

RNA; 15 BP.

(first entry)

```
Enzymatic nucleic acid, hammerhead ribozyme, virus replication, cleavage,
cirrhosis, liver failure, hepatocellular carcinoma, interferon, cancer,
                                                                                                                                                                                                                                                         Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.
                                               Substrate for hammerhead ribozyme which cleaves HCV RNA at
                                                                                                                                                                                                                         Blatt L, Mcswiggen JA, Roberts E,
                                                                                                                                                                                                                                                                                  Claim 1; Page 92; 123pp; English.
                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC.
                                                                        cirrhosis; liver failur
autoimmune disease; ss.
                                                                                                                                                                                                                                         WPI; 2000-062023/05.
AAZ64437 standard;
                                                                                                Hepatitis C virus.
                                                                                                                W09955847-A2
                                                                                                                                                26-APR-1999;
                                                                                                                                                                        18-SEP-1998;
25-FEB-1999;
                                                                                                                                                                 27-APR-1998;
                                28-MAR-2000
                                                                                                                                                                                         23-MAR-1999;
                                                                                                                                 04-NOV-1999
                AAZ64437
```

98US-00083217P. 98US-0100842P. 99US-00257608.

99US-00274553

99WO-US009027

Macejak

Pavco PA,

The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Hepatitis of virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to target these sites and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and hepatitis c virus (HCV) infection, other infectious diseases, autoimmune clancer. Length 15; Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other;

Gaps . 0 2; Indels Score 11.8; DB 1; Pred. No. 5.5e+02; 0; Mismatches 2; 86.7%; 13; Conservative Best Local Similarity Query Match Matches

717 GGAGAGTGACTCTGG 731 Н GGAGAGTAACTATGG 15

à g

AAF52792 standard; DNA; 15 AAF52792; RESULT 65
AAF52792
XX
AC AAF5
XX
DT 30-M
XX

657

(first entry) 30-MAR-2001

IGF-I oligonucleotide #3752

Antisense therapy; antiproliferative; antinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF1-1; pityliansis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; hyperacovascular condition; hyperplasia; scleroderma; wart; skin cancer; sclerotic disease; necovascular condition; hyperplasia; kidney disease;

nt. 9027.

Homo sapiens

WO200078341-A1

28-DEC-2000

21-JUN-2000; 2000WO-AU000693.

99US-0140345P 21-JUN-1999; (MURD-) MURDOCH CHILDRENS RES INST.

Edmondson SR; Werther GA, Wraight CJ,

WPI; 2001-041421/05

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Example 8; Page 85; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGB]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, clipammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-1900nucleotides of the present invention (see AAF45151 and AAF45153-19140). The method is useful for ameliorating the effects of psoriasis, nephasias, scleroderma, warts, bening growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia 

Sequence 15 BP; 3 A; 5 C; 3 G; 4 T; 0 U; 0 Other;

Gaps ; 0 4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; Indels 0; Mismatches 13; Conservative Local Similarity Query Match Best Loca Matches

0

888 874 ACTITCCTGAGATGC 1 ACTGTCCTGACATGC

AAF48903 standard; DNA; 15 AAF48903; 

RESULT 658

qq ਨੇ

ö

ВР

(first entry) 30-MAR-2001

IGFBP3 oligonucleotide #2323.

Antisense therapy, antiproliferative, antiinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor 1 receptor, IGF-1, pityriasis, IGF binding protein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilaris,

```
Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                             (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                          99US-0140345P.
                                                                                                                    21-JUN-2000; 2000WO-AU000693
                                                                                                                                                                                 Wraight CJ, Werther GA,
                                                                                                                                                                                                      WPI; 2001-041421/05.
                                                                             WO200078341-A1.
                                                                                                                                                                                                                                                           inflammation.
                                                                                                                                           21-JUN-1999;
                                                          Homo sapiens
                                                                                                 28-DEC-2000
```

Edmondson SR;

```
The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGFP-1] receptor, IGF blinding protein [IGFBP] 2 or IGFBP3), which is capable of inhibiting or reducing protein [IGFBP] 2 or IGFBP3), which is capable of oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-10 (ichthyosis, pityriasis, ruba, pilaris, serborrhoea, Keloids, Keratosis, chthyosis, pityriasis, ruba, pilaris, serborrhoea, Keloids, Keratosis, hyperneovascular condition such as a neovascular condition such as a neovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic characteries of the inside of blood chieses of the inside of blood chieses.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 3 A; 5 C; 3 G; 4 T; 0 U; 0 Other;
Example 7; Page 59; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       795 GCCAAGAGCTCTCCT 809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
```

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGR]-1 creceptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, coligonucleotide which can be used to design the antisense oligonucleotides of the present isquence is an oligonucleotides of the present invention (see AAF45151 and AAF45153-100) and operations is useful for ameliorating the effects of psoriasis, colichtyosis, pilorisis, unseful for ameliorating the effects of psoriasis, colophasias, scleroderma, warts, benign growths, cancers of the skin, and hyperneovascular condition such as a neovascular condition of the retina, byperneovascular conditions are neovascular condition of the retina, collesse, kidney disease, hyperproliferation of the inside of blood cuessels or any other hyperplasia

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or

Example 7; Page 49; 201pp; English.

inflammation.

Edmondson SR;

Werther GA,

Wraight CJ,

WPI; 2001-041421/05.

(MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P

21-JUN-1999;

21-JUN-2000; 2000WO-AU000693

WO200078341-A1

28-DEC-2000

Homo sapiens

```
Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 2 A; 3 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF48907 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IGFBP3 oligonucleotide #2327.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            709 GAGTCCCAGGAGAGT 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 GAGTCCCAGGGTGT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF48907;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF48907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
```

0

WO200078341-A1

Homo sapiens.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; plaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis, neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss.

BP

AAF47379 standard; DNA; 15

629

AAF47379 RESULT

GCATAGAGCTCTCCT 15

qq

IGFBP3 oligonucleotide #799.

(first entry)

30-MAR-2001

AAF47379;

28-DEC-2000

```
AAF48902 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-MAR-2001 (first entry)
                                                                                                                                                       21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF48902;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 6
AAF48902
ID AAF4
XX
XX
XX
XX
DDT 30-1
DE IGFI
XX
XX
DD IGFI
XX
XX
ANI:
XW ANI:
XW SKII
XW SKII
XW SCII
XW BOOM
XX XX B
ŏ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

```
The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 oligonucleotides of the present invention (see AAF45151 and AAF45153-
F45161). The method is useful for ameliotrating the effects of psoriasis,
ichthyosis, pityriasis, ruba, plaris, serborrhoea, keloids, keratosis,
neoplasias, scleroderma, warts, benign growths, cancers of the skin, a
hyperneovascular condition such as a neovascular condition of the retina,
brain or skin, growth factor-mediated malignancies, other sclerotic
disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 4 A; 4 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                           Edmondson SR;
                                                                                                                                                                                                                  (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 7; Page 59; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          vessels or any other hyperplasia
21-JUN-2000; 2000WO-AU000693
                                                                                                              99US-0140345P
                                                                                                                                                                                                                                                                                                                           Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-041421/05
```

Gaps . 0 Score 11.8; DB 1; Length 15; Pred. No. 5.5e+02; 2; Indels 0; Mismatches 4.1%; Query Match
Best Local Similarity 86.7*
....hes 13; Conservative

ô

BP.

IGFBP3 oligonucleotide #2322.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Insulin-like Growth Factor I receptor; IGF-1; pityriaais; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition of the retina; ss

WO200078341-A1

21-JUN-2000; 2000WO-AU000693

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGFF-].

Teceptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-C190nucleotides of the present invention growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or Gaps .. Query Match
4.1%; Score 11.8; DB 1; Length 15;
Best Local Similarity 86.7%; Pred. No. 5.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels Sequence 15 BP; 3 A; 5 C; 3 G; 4 T; 0 U; 0 Other; Edmondson SR (MURD-) MURDOCH CHILDRENS RES INST. Example 7; Page 59; 201pp; English. 808 99US-0140345P 1 TGCATAGAGCTCTCC 15 794 TGCCAAGAGCTCTCC Werther GA, WPI; 2001-041421/05. inflammation. 21-JUN-1999; Wraight CJ, Best Loca Matches 

IGFBP3 oligonucleotide #621. AAF47201 standard; DNA; 15 (first entry) 30-MAR-2001 AAF47201; RESULT 662 **AAF4720**3 

BP

. 0

Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor. I receptor; IGF-1; pityrissis; IGF binding protein, IGFBP-2; IGFBP3; inflammation, psoriasis; pilaris; growth factor mediated cell proliferation, ichthyosis; serborrhoea; ruba, keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hypermeovascular condition; hyperplasia; kidney disease; neobascular condition of the retina; ss;

Homo sapiens.

WO200078341-A1

28-DEC-2000.

21-JUN-2000; 2000WO-AU000693.

21-JUN-1999;

(MURD-) MURDOCH CHILDRENS RES INST.

Mon Jul 12 11:21:14 2004

d ò

```
Edmondson SR;
    Wraight CJ, Werther GA,
                                        WPI; 2001-041421/05
```

Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or inflammation

```
Example 7; Page 48; 201pp; English.
```

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see ARF45151 and ARF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, planis, serbornhoa, keloids, keratosis, neoplasias, scleroderm, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia

Sequence 15 BP; 7 A; 3 C; 1 G; 4 T; 0 U; 0 Other;

```
..
0
                      Gaps
                      ;
0
    Length 15;
                      2; Indels
      DB 1;
     Score 11.8; DB 1;
Pred. No. 5.5e+02;
                        Mismatches
4.1%; Scor.
86.7%; Pred
0; 1
                        Conservative
               Local Similarity
                        13;
       Query Match
                       Matches
```

AAF48618 standard; DNA; 15 (first entry) 30-MAR-2001 AAF48618; 663 AAF48618/ RESULT

BP.

IGFBP3 oligonucleotide #2038.

Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin discorder; Insulin-like Growth Factor I receptor; IGF-1; pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pitaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keatosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; the retina; ss.

Homo sapiens.

WO200078341-A1

28-DEC-2000

21-JUN-2000; 2000WO-AU000693

MURD-) MURDOCH CHILDRENS RES INST.

99US-0140345P

21-JUN-1999;

Edmondson SR; Wraight CJ,

WPI; 2001-041421/05

```
Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
```

Example 7; Page 57; 201pp; English.

The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense of properties of the present invention (see AAF45151 and AAF45153-01igonucleotides of the present invention (see AAF45151 and AAF45153-01igonucleotides of the present for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, ichthyosis, soleroderma, warts, benign growths, cancers of the skin, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood vessels or any other hyperplasia 

Sequence 15 BP; 4 A; 3 C; 3 G; 5 T; 0 U; 0 Other;

```
Gaps
                           .
0
4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02;
                          2; Indels
                           Mismatches
                           0;
                 Local Similarity 86.7
nes 13; Conservative
      Query Match
                               Matches
```

0

729 Н 15 cargadaargacrcr 715 CAGGAGAGTGACTCT

g

ò

RESULT 664 AAF70083

BP. AAF70083 standard; DNA; 15 AAF70083; 

Human TNFRSF11B gene ASO probe, SEQ ID NO: 139.

(first entry)

18-APR-2001

Human, TNFRSF11B; osteoclastogenesis inhibitory factor; single nucleotide polymorphism, SNP; osteoclast recruitment; osteoclast function; osteoporosis; metastatic bone disease; paget's disease; rheumatoid arthritis; periodontal bone disease; ASO; allele-specific oligonucleotide; probe; ss.

Homo sapiens.

WO200104137-A1. 18-JAN-2001. 10-JUL-2000; 2000WO-US018803

99US-0143020P. 09-JUL-1999; (GENA-) GENAISSANCE PHARM INC.

Stephens JC; Duda A, Nandabalan K, Denton RR, Chew A,

WPI; 2001-147175/15.

Human Osteoclastogenesis Inhibitory Factor nucleotides, comprising single nucleotide polymorphisms, useful for studying e.g. osteoporosis, Paget's disease and rheumatoid arthritis.

Claim 15; Page 23; 114pp; English

```
The present invention relates to novel human nucleic acid sequences (I).

The present sequence is one such nucleic acid sequence. Expression of (I) are implicated in tumour suppression or reversion and apoptoesis and viral resistance. (I) are useful as probes or primers for detecting, identifying, measuring and/or amplifying nucleic acid sequences, as nucleis and for recombinant production of polypeptides. (II), polypeptides (II) encoded by (I), vector containing (I), cells containing these vectors and antibodies (Ab) against (II) are all useful for treatment/prevention of viral, tumour and cell degeneration diseases containing these vectors and antibodies (Ab) against (II) are all useful for treatment/prevention of viral, tumour and cell degeneration diseases containing the vectors and containing the expression of (I) is also useful for diagnosis and/or prognosis of such diseases. Transgenic animals carrying (I) are used for studying the aetiology of these diseases (also immune and inflammatory diseases). Note: In the present specification, SEQ ID 1 to 2270 are shown
                                                                                                                                                                                                                                                                                                   0
  probe used to detect polymorphisms in the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tumour; cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; tumour suppression; tumour reversion; appoptosis; viral resistance; human; viral infection; cell degeneration disease; neurodegeneration; ds; Alzheimer's disease; schizophrenia; immune disease; inflammatory disease.
                 osteoclastogenesis inhibitory factor (TNFRSFIIB). Polynucleotides comprising one or more of twenty four novel single nucleotides polymorphisms in the TNFRSFIIB gene have been identified. TNFRSFIIB regulate osteoclast recruitment and function. An understanding of variations in the gene should thus be useful in developing new therapies for metabolic disorders caused by abnormal osteoclast recruitment and function such as osteoporosis, metastatic bone disease, Paget's disease, rheumatoid arthritis and periodontal bone disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New nucleic acid implicated e.g. in tumor suppression, useful for diagnosis of tumors, viral infection and cellular degeneration and for
                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                            Sequence 15 BP; 5 A; 3 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tumour suppression-related oligonucleotide #1763.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Susini L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tuijnder M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 486; 623pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MOLE-) MOLECULAR ENGINES LAB SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABQ96112 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                         855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-JAN-2001; 2001FR-00000899.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-JAN-2001; 2001FR-00000899.
                                                                                                                                                                                                                                                                                                                                                                              15
  present sequence is a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                              1 crgrgaaaacagcgr
                                                                                                                                                                                                                                                                                                                                    841 CTCTGAAGACAGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-610803/66
                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FR2819824-A1
                                                                                                                                                                                                                                                                                             13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Felerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABQ96112;
                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 665
                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 drug
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABQ961
8$6666666666666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       염
                                                                                                                                                                                                                                                                                                                                         à
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention relates to a new polymuclectide having a sequence comprising a 3-hydroxy-3-methylglutaryl coenzyme A lyase (HMGCL) isogene, selected from 6 isogenes, and defined by a corresponding set of polymorphisms whose locations and identities are given in the specification. The method of the invention is useful for haplotyping the HMGCL gene in an individual and in design of clinical trials of candidate drugs for treating a specific condition or disease predicted to be associated with HMGCL activity and is useful for genotyping HMGCL gene of an individual. The method of the invention is also useful for identifying an association between a trait and at least one haplotype or haplotype pair of HMGCL gene. AsO is useful as probes and primers and for assaying a polymorphism in the target region. The invention is useful for genotyping and/or haplotyping the HMGCL gene in an individual. Without
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           requiring any a prior knowledge of the phenotypic effect of any particular HMGCL haplotype or haplotype pair, the method of the invention provides the scientist with a tool to identify lead compounds that are more likely to show efficacy in clinical trials. The present nucleic acid sequence represents one of a collection of ASO probes (ABK14040-ABK14045)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel genetic variants of 3-hydroxy-3-methylglutaryl coenzyme A lyase useful in screening drugs to treat disease associated with the protein e.g. 3-hydroxy-3-methylglutaryl coenzyme A deficiency.
                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, 3-hydroxy-3-methylglutaryl coenzyme A lyase; HMGCL; probe; ss;
single nuclectide polymorphism; SNP; haplotyping; genotyping; ASO.
                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            t were used in the invention to detect polymorphisms in the human
                                                                                                                ;
                                                                                                                                                                                                                                                                                                                                                                                                  used to detect human HMGCL gene polymorphisms.
                                                                          Length 15;
                                                                                                              Indels
                                   Sequence 15 BP; 4 A; 2 C; 2 G; 7 T; 0 U; 0 Other;
                                                                      Score 11.8; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 5 A; 3 C; 3 G; 3 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Parks KE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 17; Page 13; 84pp; English.
                                                                                                            .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GENA-) GENAISSANCE PHARM INC.
                                                                          4.1%;
86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20-JUN-2001; 2001WO-US019834.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JUN-2000; 2000US-0212782P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Koshy B,
                                                                                                                                                   881
                                                                                                                                                                                     rrecadantriricer 15
                                                                                                                                                                                                                                                                                 ABK14045 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                Conservative
                                                                                                                                                 867 ITGGAACACITICCT
in the specification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-130786/17.
                                                                                            Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kliem SE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200198315-A2.
                                                                                                                                                                                                                                                                                                                                                                                                  probe #6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                            13;
                                                                                                                                                                                                                                                                                                                                                            08-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-DEC-2001.
                                                                                                                                                                                       Н
                                                                                                                                                                                                                                                                                                                         ABK14045;
                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Duda A,
                                                                                                                                                                                                                                            RESULT 666
                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                  ASO 1
                                                                                                                                                 à
                                                                                                                                                                                   gg
```

4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02;

Query Match Best Local Similarity

```
The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV control of the substrate sequences defined in the specification. The HCV control of HCV They can be used to treat cirrhosis, liver failure and/or replication of hepatocellular carcinoma. The HCV ribozymes are also useful for treating condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent did not form part of the printed specification. The complete sequence data for this patent was contained in electronic format directly from the USPTO web site at
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
                                                                                                                                                                                                                                                                                                         Enzymatic nucleic acid; RNA cleavage; Hepatitis C virus infection; HCV ribozyme; HCV expression; HCV replication; cirrhosis; virucide; liver failure; hepatocellular carcinoma; HCV infection; drug therapy; type I interferon; interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon; hepatotropic; antiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; ss.
Gaps
                                                                                                                                                                                                                                                                        Hepatitis C virus substrate #1272 for HCV hammerhead ribozyme #1272.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
4.1%; Score 11.8; DB 1; Length 15;
Best Local Similarity 96.7%; Pred. No. 5.5e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Macejack D;
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 3 A; 6 C; 1 G; 0 T; 5 U; 0 Other;
2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pavco PA,
 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    seqdata.uspto.gov/psipsDIDEntry.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Roberts B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 57; 80pp; English.
 .<del>.</del>
                                                                                                                                                                  ABX01490 standard; RNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-00274553.
                                      888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00274553
                                                                                                                                                                                                                                        (first entry)
                                    874 ACTITCCIGAGAIGC
                                                                 15 ATTTTCCRGAGATGC
 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Blatt L, Mcswiggen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLATT L.
MCSWIGGEN J A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-617759/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ROBERTS B.
PAVCO P A.
MACEJACK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                           Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2002082225-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-MAR-1999;
                                                                                                                                                                                                                                        23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-JUN-2002
 13;
                                                                                                                                                                                                     ABX01490;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (ROBE/)
(PAVC/)
(MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BLAT/)
(MCSW/)
                                                                                                                            667
                                                                                                                              RESULT 667
ABX01490/c
   Matches
                                                                                                                                                                                                     ð
```

```
The present invention provides the human neuropeptide Y (NPY) gene and single nucleotide polymorphisms (SNPs) identified therein. The sequence can be used in the treatment of disorders associated with NPY, including atherosclerosis, obesity, psychological disorders and alcoholism. The present sequence is an allele specific probe used to isolate the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New genetic variants of the human Neuropeptide Y (NPY) gene useful for treating disorders affected by abnormal expression or function of NPY isogene e.g., atherosclerosis or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; neuropeptide Y; NPY; isogene; SNP; atherosclerosis; obesity; psychological disorder; single nucleotide polymorphism; alcoholism; antiarteriosclerotic; anorectic; probe; ss.
                                                                                                                                                                                                                                Human; neuropeptide Y; NPY; isogene; SNP; atherosclerosis; obesity; psychological disorder; single nucleotide polymorphism; alcoholism; antiarteriosclerotic; anorectic; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chew A, Denton RR, Lanz EM, Nandabalan K, Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human neuropeptide Y allele specific probe SEQ ID NO: 14.
                                                                                                                                                                                                    Human neuropeptide Y allele specific probe SEQ ID NO: 15.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 7 A; 4 C; 4 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 11; Page 16; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAL48090 standard; DNA; 15 BP.
                                                                                                            AAL48091 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                21-DEC-2000; 2000WO-US034758.
                                                                                                                                                                                                                                                                                                                                                                                                                              21-DEC-2000; 2000WO-US034758.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          825 CTGTGTCTTTTCT 839
717 GGAGAGTGACTCTGG 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      crestrestriter 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                             15 GGAGAGTAACTATGG 1
                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-566671/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NPY coding sequence
                                                                                                                                                                                                                                                                                                                                 WO200251857-A1.
                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-SEP-2002
                                                                                                                                                                         27-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                  04-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAL48090;
                                                                                                                                            AAL48091;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          699
                                                                                              AAL48091/
ID AAL4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAL48090/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT
                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
   à
                               셤
```

.; 0

ö

Gaps

0

13; Conservative

07-APR-2000; 2000US-00544934.

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /note= "T is covalently linked to Lys(Flu)-Lys(Flu) where Flu= 5-(and 6)-carboxyfluoroescein, optional"
                                                                                                                                                                                                                                                                                      The present invention provides the human neuropeptide Y (NPY) gene and single nucleotide polymorphisms (SNPs) identified therein. The sequence and be used in the treatment of disorders associated with NPY, including atherosclerosis, obesity, psychological disorders and alcoholism. The present sequence is an allele specific probe used to isolate the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Probe; 23S rRNA; 16SrRNA; tuberculosis; MTC; MOTT; peptide nucleic acid; mycobacterium tuberculosis complex; precursor rRNA; rDNA; 5S rRNA; ss; mycobacterium other than tuberculosis.
                                                                                                                                                                                                         New genetic variants of the human Neuropeptide Y (NPY) gene useful for treating disorders affected by abnormal expression or function of NPY isogene e.g., atherosclerosis or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                              Length 15;
                                                                                                                                                         Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                      2; Indels
                                                                                                                                                                                                                                                                                                                                                                                    Sequence 15 BP; 7 A; 3 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                           Score 11.8; DB 1;
Pred. No. 5.5e+02;
0; Mismatches 2;
                                                                                                                                                          Lanz EM, Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'note= "C is amidated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       M. tuberculosis 23S rRNA probe #6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag= a
/mod_base= OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /*tag= b
/mod_base= OTHER
                                                                                                                                                                                                                                                                Claim 11; Page 16; 80pp; English
                                                                                                                                (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABX76480 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-APR-2000; 2000US-00544934.
                                                                             21-DEC-2000; 2000WO-US034758.
                                                                                                      21-DEC-2000; 2000WO-US034758.
                                                                                                                                                                                                                                                                                                                                                                                                             4.1%;
86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGTGTCTCTTTTCT 839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mycobacterium tuberculosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cresercacririci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-APR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                       13; Conservative
                                                                                                                                                          Denton RR,
                                                                                                                                                                                WPI; 2002-566671/60.
                                                                                                                                                                                                                                                                                                                                                           NPY coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2002137035-A1
                          WO200251857-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified base
 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-SEP-2002
                                                   04-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABX76480;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15
                                                                                                                                                          Chew A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 670
                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
```

```
The invention relates to a peptide nucleic acid capable of hybridising to a target sequence of Mycobacterial rDNA, precursor rRNA or rRNA (5S, 16S or 238) forming detectable hybrids. Also included are detecting a target sequence of mycobacteria in a sample comprising contacting rRNA or rDNA in the sample with peptide nucleic acid probes (hybridisation takes place between the probe and the rRNA or rDNA), observing or measuring any formed detectable hybrids and relating the observation or measurement to the presence of a target sequence of mycobacteria in the sample, and a kit for detecting a target sequence of mycobacteria in particular a target sequence of mycobacteria in particular a probes are used for detecting a target sequence of Mycobacteria of Mycobacteria conflux (MTC). The probes are used for detecting a target sequence of MYCOBacteria mycobacterium other than tuberculosis, MOTT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             present in a sample, e.g. sputum, laryngeal swabs, gastric lavage, bronchial washings, biopsies, aspirates, expectorates, body fluids, urine, tissue sections as well as food samples, soil, air and water samples and their cultures. The probe is able to penetrate the cell wall of the mycobacteria. It is able to hybridise to Mycobacterial precursor trNRA and trhout harsh treatment of the mycobacterial cells, therefore avoiding a risk of interfering with the morphology of the cells. The present sequence is an M. tuberculosis probe for 165 or 235
                                                                                                                                                                                       Peptide nucleic acid probes for detecting target sequences of Mycobacteria in samples, e.g., sputum, which are capable of hybridizing to a target sequence of mycobacterial rDNA, precursor rRNA or rRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ss; stimulus-responsive DNA organization; supercoil; rotation; external stimulus; medical micromachines; artificial muscle.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 11.8; DB 1; Length 15;
Pred. No. 5.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stimulus-responsive DNA organization oligonucleotide #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 15 BP; 2 A; 10 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                        Claim 22; Page 37; 74pp; English.
                                                                                                                 Mollerup TA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-AUG-2002; 2002WO-JP008656.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-FEB-2002; 2002JP-00051927.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Match 4.1%;
Local Similarity 86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TCACCACCCTCCTCC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADD71431 standard; DNA; 15
                                                                                                                                                                                                                                                  forming detectable hybrids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            922 TCACCACCACCCTCC
                                                                        MOLL/) MOLLERUP T A.
                                                                                                                                                       WPI; 2003-174116/17.
                                                                                                                 Stender H, Lund K,
                                    Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003072772-A1.
                                    STENDER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADD71431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                  (STEN/)
                                                          rond/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADD71431,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
```

ö

```
operably linked to a heterologous nucleic acid, a nucleic acid capable of detecting a single nucleotide polyworphism (SNP) in the optineurin promoter operably linked to a heterologous sequence, diagnosing of promoter operably linked to a heterologous sequence, diagnosing or prognosing glaucoma in a sample obtained from a cell or bodily fluid (comprising detecting a polymorphism of a phenotype), detecting a SNP sequence variation in a sample containing on a sample containing DNA, determining the presence or increased susceptibility to glaucoma or to a progressive ocular hypertensive disorder resulting in loss of visual field in a patient (or the severity any perfession of glaucoma in a patient, comprising providing camplification reaction primers that direct amplification of a selected nucleic acid region containing the variation within the optineurin containing a mample of detecting a polymorphism (comprising cobtaining a sample containing human genomic DNA, providing a nucleic acid detecting a SNP located within an optineurin promoter, and diagnose and correcting the polymorphism). The invention is used to diagnose and present sequence is an optineurin promoter motif, repeat element or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to novel proteins (ADE52648-ADE52660, ADE52670 and ADE52672) and their coding sequences (ADE52635-ADE52647,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Proteins with DNA binding activity and substances that affect their activity or expression, useful for treating associated disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 11.8; DB 1; Length 15;
Pred. No. 5.5e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA-binding protein; interferon-activatable protein; ss.
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 15 BP; 11 A; 0 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 9; SEQ ID NO 94; 237pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hayashizaki Y, Kamiya M, Kubodera H;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 4.1%; Scc
Best Local Similarity 86.7%; Pre
Matches 13; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE52728 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-APR-2002; 2002JP-00117840.
30-APR-2002; 2002JP-00128418.
30-APR-2002; 2002JP-00128779.
04-DEC-2002; 2002JP-00352469.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (DNAF-) DNAFORM KK. (MITU') MITSUBISHI CHEM CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-APR-2003; 2003WO-JP004981,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    830 TCTCTTTTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                          putative regulatory region.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15 TATCTTTTCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotide SEQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2004-011681/01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (RIKE ) RIKEN KK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003089466-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-0CT-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADE52728;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADE52728/
         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                              undergoing formation/dissociation of a supercoil or rotation in response to an external stimulus and comprises a number of plasmid DNAs ligated in it. The DNA organization is applicable in various materials and body parts or medical micromachines e.g. artificial muscles. This sequence represents an oligonucleotide used in the method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The invention relates to an isolated nucleic acid (NI) comprising at least 20 but not more than 1500 consecutive nucleotides of the optineurin promoter appearing as ADE13890. Also included are the optineurin promoter
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New nucleic acid sequences of the optineurin gene are useful to detect polymorphisms particularly single nucleotide polymorphisms in the optineurin promoter to diagnose, prognose and treat glaucoma and related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, optineurin, ds, ophthalmological; single nucleotide polymorphism, SNP; glaucoma; progressive ocular hypertensive disorder; glaucoma related disorder; motif; repeat element; regulatory region.
                                                                                                                   Stimulus-responsive DNA organization of highly compatible functional material undergoing reversible formation/dissociation of supercoil or rotation in response to external stimulus, useful as e.g. artificial
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Optineurin promoter motif, repeat element or regulatory region #111.
                                                                                                                                                                                                                                               The invention relates to a stimulus-responsive DNA organization
                                                                                                                                                                                                                                                                                                                                                                                                                                                .,
                                                                                                                                                                                                                                                                                                                                                                                                            Length 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 10 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                          4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 5.5e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 11; SEQ ID NO 113; 159pp; English.
                                                                                                                                                                                                           Example 1; SEQ ID NO 1; 29pp; Japanese.
           (NISC-) JAPAN SCI & TECHNOLOGY CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ξ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Si.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADE14002 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-MAR-2002; 2002US-00091281.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-MAR-2002; 2002US-00091281.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  828 TGTCTCTTTTCTTCT 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rrrcrcrrrrcrrcr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Raymond V, Morissette J,
                                                                                                                                                                                                                                                                                                                                                                                                                             Best_Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-864168/80.
                                                                                 WPI; 2003-679952/64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (SIEE/) SI E.
(RAYM/) RAYMOND V.
(MORI/) MORISSETTE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2003190617-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-OCT-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE14002;
                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                           muscles.
                                               Yui N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADE14002/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ωp
```

ö

Gaps

.;

```
(MILL-) MILLENNIUM PHARM INC.
     Capture probe 14.
                                                                        WO9829736-A1
                                                                                                                31-DEC-1997;
                                                                                                                                    31-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-DEC-1997;
                                                                                            09-JUL-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US5882893-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-MAR-1999
                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX02894;
                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX02894
     à
                                                                                                                                                                                                                                                                                                                                                                                                                                         임
                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                            Oligo:nucleotide primer comprising amplification and sequencing portions - useful for determination of fungal DNA sequences by PCR amplification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAT02855-T02860 are amplification primers for DNA coding for fungusderived 18S rRNA. These primers may be bound at the 5' end to the 3' end of a sequencing primer (AAT02861-T02863). The resulting oligonucleotide primers comprising amplification and sequencing portions (AAT02864-T02869). These primers are useful for the determination of the base sequences of fungi
ADE52669 and ADE52671). The proteins have a DNA-binding activity or an interferon-activatable protein (IAP)-like activity. The present oligonucleotide is related to HSFI (short), HSF2, dHSF and fungalHSF.
                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                    Polymerase chain reaction; primer; ribosomal RNA; amplification; sequencing; matsutake mushroom; ss.
                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .,
                                                                                                                                                                                                                                Fungus-derived 18S rRNA encoding DNA PCR amplification primer.
                                                          4.1%; Score 11.8; DB 1; Length 15; 86.7%; Pred. No. 5.5e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.8; DB 1; Length 16;
Pred. No. 5.9e+02;
0; Mismatches 2; Indels
                                       Sequence 15 BP; 12 A; 0 C; 3 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 16 BP; 2 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 2; Page 2; 8pp; Japanese
                                                                                                                                                                       AAT02859 standard; DNA; 16 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%;
86.7%;
                                                                                                   830 TCTCTTTTCTCT 844
                                                                                                                                                                                                                                                                                                                                               93JP-00346106
                                                                                                                                                                                                                                                                                                                                                                 93JP-00346106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTGGTGCCAAGAGC 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15 TTTCTTTCTTTCT 1
                                                                                                                                                                                                                                                                                                                                                                                   (RIKA ) RIKAGAKU KENKYUSHO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV45768 standard; DNA; 16
                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-DEC-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 86.77
Matches 13; Conservative
                                                                     Best_Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1995-279918/37.
                                                                                                                                                                                                                                                                                  Agaricus bisporus.
                                                                                                                                                                                                             14-MAR-1996
                                                                                                                                                                                                                                                                                                      JP07177889-A
                                                                                                                                                                                                                                                                                                                                             22-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                 22-DEC-1993;
                                                                                                                                                                                                                                                                                                                          18-JUL-1995
                                                                                                                                                                                           AAT02859;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             789
                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV45768
                                                                                                                                                   RESULT 674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV45768

ID AAV4

XX

AC AAV4

XX

DT 24-D:
                                                                                                                                                             AAT02859
 8×33333
                                                                                                                                                                        à
                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
```

```
Sequences AAV45755-V45770 are capture probes which are surface bound and arranged in an array of biosites attached to a solid support. These are designed to bind rapidly and efficiently to the target probes (AAV4571-V45786) capture domain. They can be used in the method of the invention in the following areas: diagnosis, drug screening, analysis of gene expression, cell sorting and microorganic monitoring, analysis of multiple point mutations and genotyping
Probe; biosite; target probe; capture domain; microorganic monitoring; multiple point mutation; genotyping; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Reaction substrates for multiplexed micro:assay(s) between analyte and binder - has probes attached to array of sites on surface, useful for,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             mACHR-6; muscarinic acetylcholine receptor 6; disorder; secretion; acetylcholine responsive cell; phosphatidylinositol turn-over; smooth muscle cell contraction; nervous system disorder; glandular; schizo-effective disorder; affective disorder; sleep disorder; movement disorder; eating disorder; drinking disorder; human; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 5.9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 16 BP; 3 A; 5 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mendoza LG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human mACHR-6 cDNA antisense inhibitor #5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Page 35; 100pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     e.g. diagnosis and drug screening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hogan ME,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                      97WO-US024098
                                                                                                                                                                                                                                                                                                                                                                                             96US-0034627P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      774 TCTGAGGCCAGCCCC 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-00985090.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 TCTGAGGGCAACCTC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX02894 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GENO-) GENOMETRIX INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eggers MD, Balch WJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 1998-388276/33
```

ö

for

```
Nucleic acids encoding muscarinic acetylcholine receptor 6 - useful modulating the effects of acetylcholine on acetylcholine responsive
          WPI; 1999-214063/18.
   Goodearl AD
```

```
This invention describes the isolation of a novel numen muscathinic cactylcholine receptor 6 (mACHR-6), capable of modulating the effects of acetylcholine receptors 6 (mACHR-6), capable of modulating the effects of acetylcholine na acetylcholine responsive cells. mACHR-6 cDNAs and polypeptides may be used to detect naturally occurring mutations of the macHR-6 gene and determine if a subject with the mutated gene is at risk of (or is predisposed to have) a macHR-6 related disorder, modulate cell corresponding the macHR-6 (e.g. biological processes mediated by a certivity mediated by mACHR-6 (e.g. biological processes mediated by a certival partial disorders and signaling), secretion of a molecule gmooth muscle cell, treat disorders mediated by abnormal mACHR-6 activity smooth muscle cell, treat disorders mediated by abnormal mACHR-6 activity smooth muscle cell, treat disorders mediated by abnormal mestic dysnomia, amnestic spatial disorientation, Kluver-Bucy syndrome, alzheimer's related memory loss and learning disability, visual.

Alzheimer's related memory loss and learning disability, visual.

Alzheimer's related memory loss and learning disability, visual.

Alzheimer's related memory loss and learning disorders; sleep anormalities, and depressive illness, affective disorders; e.g. claep watefulness, and body temperature or respiratory depression of abnormalities during sleep), pain generating mechanism disorders (e.g. related to Parkinson's disease), cathor disorders (e.g. related to Parkinson's disease), cathor disorders (e.g. related disease), cathor disorders (e.g. pathologic chronic obstructive airways disease), cardiac disorders (e.g. pathologic chronic obstructive airways disease), cardiac disorders (e.g. pathologic bradycardia or tachycardia, arrhythmia, flutter and fibrillation), and corrected or electronic and dispetes mellitus and disorders (e.g. pathologic bradycardia or tachycardia, arrhythmia, flutter and fibrillation), and corrected or electronic obstructive airways disease), cardiac disorders
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                This invention describes the isolation of a novel human muscarinic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 5.9e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 16 BP; 2 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
Disclosure; Col 85-86; 59pp; English.
```

```
ö
                                                 775 CTGAGGGCAGCCCCT 789
          Best Local Similarity 86.7
Matches 13; Conservative
Query Match
                                                       ð
```

AAX59175 standard; DNA; 16 BP creacceaeccer 15 AAX59175; RESULT 677 AAX59175

Human flh84g5 3' untranslated region antisense oligonucleotide. 

(first entry)

06-SEP-1999

G protein coupled receptor; flh84g5; human; diagnosis; screening; therapy; antiparkinsonian; nootropic; neuroprotective; neuroleptic; antidepressant; antiarrythmic; antidiabetic; antiinflammatory; phosphatidylinositol; antisense; ss.

Homo sapiens WO9928470-A1 10-JUN-1999 Synthetic

98WO-US025832. 04-DEC-1998;

This oligonucleotide is complementary to a portion of the 3' untranslated region of the human G protein coupled receptor fin8455 gene corresponding to nucleotides 2133-2148 of the sequence given in AAX53167. It can be concluded to modulate fin8465 activity, and hence to treat a disease or disorder characterized by, or associated with, aberrant or abnormal fin8455 nucleic acid expression and/or fin8455 polypeptide activity by inhibiting fin8466 nucleic acid expression. Biseases and disorders system related disorders, e.g. ammesia, apraxia, agnosia, ammestic system related memory loss and learning disability; disorders affecting consciousness such as viewal hallucinations, perceptual disturbances or delerium associated with Lewy body dementia, schizzo-cffective disorders, schizophrenia with mood swings, depressive illness of frimary and secondary); affectived disorders such as viewal promession, paradoxical abnormalities in patients suffecting from e.g. depression, paradoxical costing pain generation mechanisms e.g. pain related to irritable bowel syndrome pain generation mechanisms e.g. pain related to irritable bowel syndrome convenent disorders; eating disorders e.g. insulin hypersecretion related obesity or drinking disorders e.g. insulin hypersecretion related coesity or drinking disorders e.g. insulin hypersecretion always disease; cardiac muscle disorders, e.g. pain characterion and disorders, e.g. intribale bowel syndrome, diverticular disease, criardaceders, e.g. intribale bowel syndrome, diverticular disease, cardiac muscle disorders, e.g. pathologic bradycardia, always disease, cardiac muscle disorders, e.g. pathologic bradycardia, arrhythmia, flutter or fibrillation; and gland related New nucleic acid encoding an isolated G-protein coupled receptor useful for treating nervous system related disorders. Distefano P; Xie M, Disclosure; Page 64; 140pp; English. Glucksmann MA, 98US-00042780. (MILL-) MILLENNIUM PHARM INC. 97US-00985090 WPI; 1999-394858/33. Goodearl ADJ, 04-DEC-1997; 17-MAR-1998; 

Gaps . 0 4.1%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 5.9e+02; Indels 0; Mismatches Query Match Best Local Similarity 86.79 Matches 13; Conservative

Sequence 16 BP; 2 A; 6 C; 5 G; 3 T; 0 U; 0 Other; disorder such as xerostomia or diabetes mellitus

·: 0

> ð 셤

AAH44581 standard; DNA; 16 BP.

RESULT 678 AAH44581

Rat mACHR-6 antisense oligonucleotide SEQ ID NO:26. (first entry) (revised) 20-MAR-2003 01-NOV-2001 AAH44581;

antiparkinsonian; nootropic; neuroprotective, neuroleptic; antidiabetic; antiderseant; antiarrhythmic; antiliflammatory; carnitine; pain; g-protein coupled receptor; nervous system related disorder; xerostomia; disorders affecting consciousness; affective disorder; movement disorder; irritable bowel syndrome; drinking disorder; gland related disorder; smooth muscle related disorder; cardiac muscle disorder; diabetes mellitus; diagnosis; drug screening; antisense; ss. Rat; muscarinic acetylcholine receptor 6; mACHR-6; detection;

98US-00165543 97US-00985090 98US-00042780

```
The present invention describes muscarinic acetylcholine receptor 6
(mACHR-6), which is a member of the G family of proteins. mACHR-6 has
antiparkinsonian, nootropic, neuropratective. neuroleptic, antidiabetic
antidepressant, antiarrhythmic and antidiflammatory activities. The mACHR-6 protein, is capable of modulating the effects of a G-protein coupled
receptor (GPTR) ligand such as acetylcholine or an acetylcholine like
ceceptor (GPTR) ligand such as acetylcholine or an acetylcholine like
molecule such as carnitine, e.g. by modulating phospholipase C
signalling/activity. Products from the present invention can be used for
treating disorders mediated by abnormal mACHR-6 protein activity such as
nervous system related disorders, disorders affecting
factive disorders such as RBM sleep abnormalities, disorders affecting
pain generation mechanisms such as pain related to irritable bowel
syndrome or chest pain, movement disorders, cardiac muscle disorders, and
disorders, smooth muscle related disorders, arting disorders, and
cland related disorders such as xerostomia or diabetes mellitus. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           products can also be used for detection, diagnosis and drug screening. The present sequence represents a rat mACHR-6 antisense oligonucleotide which is given in the exemplification of the present invention. (Updated on 20-MAR-2003 to correct DR field.)
                                                                                                                                                                                                                                                                                                                                         nucleic acid encoding an isolated G-protein coupled receptor useful treating nervous system related disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human leukocyte antigen, HLA, class I allele type; probe; PCR primer; amplification, hybridisation; organ transplant; gene typing; diagnosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human leukocyte antigen PCR primer BASF-1 SEQ ID NO:88.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 16 BP; 2 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; Col 49; 64pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA67030 standard; DNA; 16 BP
                                                                                                                                                                                                                            (MILL-) MILLENNIUM PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       775 CTGAGGGCAGCCCT 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 86./",
Thes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 creaeccaeccr 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-OCT-2000 (first entry)
                                                                                                                                                                                                                                                                                                       WPI; 1999-394858/33
                                                                                                                                                                                                                                                                 Glucksmann MA,
                                                                                                                              02-OCT-1998;
                                                                                                                                                                                        17-MAR-1998;
                                                                                                                                                                    04-DEC-1997;
                                                     US6093545-A.
                                                                                           25-JUL-2000
                 Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAA67030;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 679
                                                                                                                                                                                                                                                                                                                                                              Eor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA67030
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BX BX SX KK KK X BX BX BX X X X X X B
δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
The present invention describes a method for distinguishing a human pleukocyte antigen (HLA) class I antigen or allele by a combination of polymerase chain reaction (PCR) using a primer pair whereby all HLA-A, -B or -C alleles can be amplified or using reverse hybridisation analysis comprising a DNA probe covalently bonded to microtitre plate wells which are hybridisable specifically with the base sequence of at least one specific HLA-A, -B or -C allele. The method is applicable in gene typing, judging donor-recipient compatibility during organ transplant and correlation analysis for diagnosis of various diseases. The method is simple, rapid and accurate, with possibility of mechanisation and automation, without the problems encountered by using the prior-art techniques. AAA66943 to AAA66772 represent oligonucleotide probes and PCR primers for use in the method of the present invention
                                                                                                                                                                                      Simple, rapid and accurate method for distinguishing HLA class I allele type with possibility of mechanization and automation, applicable in judging donor-recipient compatibility during organ transplant and disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sodium channel; modulator; sodium channel beta-1A subunit; pain; rat; analgesic; neuroprotective; RT-PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Screening for sodium channel activity modulators, used to decrease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rat sodium channel beta-1A subunit cDNA amplifying reverse primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 4.1%; Score 11.8; DB 1; Length 16; Best Local Similarity 86.7%; Pred. No. 5.9e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16 BP; 4 A; 5 C; 6 G; 1 T; 0 U; 0 Other
                                                                                                                                                                                                                                                                                Claim 9; Page 70; 83pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ORIH ) ORIHO-MCNEIL PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-SEP-2000; 2000WO-US027034.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0156837P.
                99WO-JP005527.
                                               98JP-00335151.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 CCGCCAGTCCGAGGA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF57677 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                  (SHIO ) SHIONOGI & CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       705 CAGCGAGTCCCAGGA
                                                                                                                   Kaneshige T;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       D'andrea M, Rogers KE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-281683/29.
                                                                                                                                                      WPI; 2000-400097/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200123570-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-SEP-1999;
                07-OCT-1999;
                                                 26-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-APR-2001
                                                                                                                                                                                                                                               diagnosis.
                                                                                                                     Moribe T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF57677;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF57677/c
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
```

Gaps

ö

4.1%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 5.9e+02; ative 0; Mismatches 2; Indels

WO200031295-A1

02-JUN-2000

Homo sapiens.

ö

Page 346

The invention relates to a method of screening for a modulator of sodium channel activity that comprises contacting a candidate modulator with a cell co-expressing a sodium channel beta-ih submint with a sodium channel alpha submint, and determining the effect of the candidate modulator on the sodium channel function in the cell. The method is useful for identifying sodium channel activity modulators, preferably causing decreased beta ih submint expression. The modulators can be used to decrease neuropathic pain, and to decrease the number of febrile seizures comprises contacting a candidate compound with a cell in an individual. The present sequence represents a reverse primer beta1A5 used in RT-PCR amplification of the DNA encoding a rat sodium channel beta-1A subunit Example 1; Page 78; 124pp; English. expressing the channel pain, neuropathic 

4.1%; Score 11.8; DB 1; Length 16; 66.7%; Pred. No. 5.9e+02; ve 0; Mismatches 2; Indels Sequence 16 BP; 7 A; 4 C; 5 G; 0 T; 0 U; 0 Other; GTTGGCTGTGTCTCT 834 86.78; 13; Conservative Gerndergrerer Local Similarity 820 16 Query Match **latches** g à

AAF30671 standard; DNA; 16 (first entry) 11-JUN-2001 AAF30671; AAF30671 RESULT

BP.

Sodium channel betalA; rat; splice variant; analgesic; cardiant; pain; seizure; therapy; PCR primer; ss. Sodium channel betalA subunit PCR primer betalA5. 99US-0156837P. 29-SEP-2000; 2000WO-US027119. WO200123571-A1. 30-SEP-1999; 05-APR-2001. Rattus 

Kazen-Gillespie K, Rogers KE; (UNMI ) UNIV MICHIGAN. (ORTH ) ORTHO-MCNEIL PHARM INC Isom LL,

WPI; 2001-258136/26.

An isolated nucleic acid encoding a sodium channel betalA subunit polypeptide, useful for identifying modulators of sodium channel betalA subunits and treating neuropathic pain. Example 1; Page 79; 121pp; English. The present sequence is that of PCR primer betalA5. The primer is based on a sequence unique to rat sodium channel betalA subunit. It was used with primer betalA3 (see AAF30670) to confirm that a betalA transcript identified by library screening was expressed by rat adrenal gland. The primers amplify a region of betalA from the N-terminus past the region in which the amino acid sequence changed from identity to non-identity to betal, or the putative splice site, by RT-PCR using rat adrenal gland total RNA as template. Novel rat sodium channel betalA subunit (see AAB20371) is a splice variant of sodium channel betal, resulting from

retention of intron 3 containing an in-frame stop codon. This alternative splicing event produces a novel C-terminus. Methods and compositions for using betalA nucleic acids and proteins are described. A claimed method of screening for a modulator of sodium channel activity utilises a cell co-expressing a sodium channel betalA subunit and a sodium channel alpha subunit. A claimed method for decreasing neuropathic pain, and a claimed method for decreasing the number of fibrillar seizures in an individual, both involve administering a modulator of the sodium channel betalA 4.1%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 5.9e+02; ive 0; Mismatches 2; Indels Sequence 16 BP; 7 A; 4 C; 5 G; 0 T; 0 U; 0 Other; Query Match subunit 

820 GTTGGCTGTGTCTCT 834 16 GCTTGCTGTGTCTCT 2 Local Similarity 86.7 nes 13; Conservative Best Loca Matches à g

RESULT 682 ABN85725

;

Gaps

..

.. 0

Gaps

.:

gene therapy; apoptosis; cancer; tumour; leukaemia; Human DBD-Flag fusion protein PCR primer 1. Human; cytostatic; gene therapy;
genotoxic; DBD; PCR; primer; ss. ABN85725 standard; DNA; 16 (first entry) Homo sapiens. 27-SEP-2002 ABN85725;

13-DEC-2000; 2000US-0254924P. 13-DEC-2001; 2001WO-US047948. (GEOU ) UNIV GEORGETOWN WO200248344-A2. 20-JUN-2002 

Inducing apoptosis in a tumor cell for treating cancer, e.g. prostate cancer, by introducing a DNA construct comprising coding region of DNA repair inhibitory agent linked to tissue-specific regulatory sequences. Ä Smulson M, Soldatenkov VA, Jung M, WPI; 2002-583512/62.

Dritschilo

Example; Page 19; 41pp; English.

The invention relates to inducing (M) apoptosis in a cell for treating cancer, comprising introducing into the cell a recombinant DNA construct having the coding region of a DNA repair inhibitory agent linked to tissue-specific transcriptional regulatory sequences. (M) is useful for tissue-specific transcriptional regulatory sequences. (M) is useful for inducing apoptosis in a tumor cell, including lung, breast, colon, liver, color kidney, kin, or ovarian tumour cell, aquamous cell carcinoma, non-squamous cell carcinoma, glioblastoma, ascoma, melanoma, papilloma, neuroblastoma and leukaemia cell. (M) is useful for treating cancer, such cas brain, stomach, breast, ovarian, cervical, prostate, skin, lung, pancreatic, liver, colon cancer and leukaemia. The method involves administering the host by genotoxic treatments. The host is a human diagnosed with cancer. The genotoxic treatments comprises chemotherapeutic drugs or radiation such as gamma-irradiation, X-rays, microwaves, electronic companions and the like. The chemotherapeutic drugs are alkylating agents (e.g. cis-diamine dichloroplatinum or melphalan), inhibitors of DNA replication, mitosis or chromosomal segregation, (e.g. etcoposide (VP-16),

.. 0 camptothecin and adriamycin also known as doxorubicin) and radiomimetic agents (e.g. bleomycin). The present sequence is that of a PCR primer for RT-PCR analysis of a human DBD-Flag fusion protein used in examples of Gaps . 0 Length 16; 2; Indels Sequence 16 BP; 6 A; 7 C; 0 G; 3 T; 0 U; 0 Other; Score 11.8; DB 1; Pred. No. 5.9e+02; 0; Mismatches 4.1%; 86.7%; 921 ATCACCACCACCTC 935 ATCACCATCACCATC 15 13; Conservative Local Similarity the invention cches 8X33333 d

ABX11859 standard; DNA; 16 (first entry) 10-MAY-2003 

Human muscarinic acetylcholine receptor 6 antisense oligonucleotide #6

Human; ss; mACHR-6; muscarinic acetylcholine receptor-6; cognitive disorder; amnesia; amnestic spatial disorientation; Kluver-Bucy syndrome; Alzheimer's related memory loss; antisense; Flearning disability; consciousness disorder; visual hallucination; delirium; schizo-effective disorder; schizophrenia; depression; affective disorder; sleep disorder; pain generation disorder; irritable bowel syndrome; chest pain; movement disorder; pearkinson's disease; eating disorder; insulin hypersecretion obesity; heart muscle disorder; bradycardia; arrhythmia; flutter; fibrillation; gland related disorder; xerostomia; diabetes mellitus.

Homo sapiens.

US2002166131-A1

07-NOV-2002

99US-00349755 08-JUL-1999;

98US-00042780. 97US-00985090 04-DEC-1997; 17-MAR-1998;

(MILL-) MILLENNIUM PHARM INC.

Goodearl ADJ, Glucksmann MA;

WPI; 2003-298709/29.

New muscarinic acetylcholine receptor 6 (mACHR-6) nucleic acids and proteins, useful for modulating acetylcholine or phosphatidylinositol, particularly for treating e.g. schizophrenia, chest pain, tachycardia or

Disclosure; Page 26; 66pp; English.

The invention relates to an isolated human or rat muscarinic acetylcholine receptor 6 (mACHR-6) nucleic acid molecule and the encoded protein. Also included are (non-human) host cells comprising the mACHR-6 nucleic acid molecule, an antibody that selectively bind the polypeptide above, a method for producing the polypeptide by culturing the host cell such that the mACHR-6 nucleic acid is expressed, a method for detecting the presence of the mACHR-6 polypeptide and nucleic acid, a method for identifying a compound that binds to the mACHR-6 polypeptide and a method for modulating the activity of the mACHR-6 polypeptide. The mACHR-6 polypeptide, antibody or modulator are useful in drug screening assays, diagnostic assays for identifying diseases, allelic screening, pharmacogenetic testing, methods of treatment,

```
ô
                                                                               particular, the mACHR-6 polynoclotide, polypeptide or antibody is useful for treating or diagnosing cognitive disorders (e.g. amnesia, amnestic spatial disorientation, Kluver-Bucy syndrome, Albraimer's related memory loss or learning disability), disorders affecting consciousness (e.g. visual hallucinations or delirium), schizo-effective disorders (e.g. schizophrenia or depression), affective disorders (e.g. sleep disorders), disorders affecting pain generation mechanisms (e.g. pain related to irritable bowel syndrome, or chest pain), movement disorders (e.g. Parkinson's disease), eating disorders (e.g. insulin hypersecretion obesity), heart muscle related disorders (e.g. bradycardia, tachycardia, arrhythmia, flutter or fibrillation), or gland related disorder (e.g. arrhythmia, and diabetes mellitus). The present sequence is an antisense oligonucleotide targetting human mACHR-6
pharmacogenomics or monitoring the effects during clinical trials. In
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 16; 86.7%; Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Seguence 16 BP; 2 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               775 CTGAGGGCAGCCCCT 789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
\mathcal{G}_{\mathcal{G}}^{\mathcal{G}} \mathcal{G}_{\mathcal{G}}
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ठ
```

Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; VBGF hamerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; Human flt1 VEGF receptor hammerhead ribozyme substrate #1147. (first entry) 28-JUL-1999

BP.

AAX69852 standard; RNA; 17

AAX69852

AAX69852;

1 CTGAGGCCAGGCCCT 15

WO9715662-A2 01-MAY-1997. 

foetal liver kinase 1; ss.

95US-0005974P. 96US-00584040. 96WO-US017480 26-OCT-1995; 11-JAN-1996; 25-OCT-1996;

(RIBO-) RIBOZYME PHARM INC. CHIRON CORP CHIR ) Mcswiggen J, Stinchcomb D, Escobedo J; Pavco P,

WPI; 1997-259017/23.

Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.

Claim 4; Page 81; 218pp; English.

The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VBGF). A patient preferably human having a condition associated with the level of the fms-like tyrosine kinase 1 (fl.t-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour anglogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be

```
;
                                                                                                                                                                                                                                                                                                                                                                                                                        Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyzosine kinase 1 (Fl1-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, coular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAXX7175 to AAX75722 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                            Gaps
                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                             Human flt1 VEGF receptor hammerhead ribozyme substrate #1158.
                                                                                                     4.1%; Score 11.8; DB 1; Length 17; 60.0%; Pred. No. 6.4e+02; tive 4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 2 A; 4 C; 5 G; 0 T; 6 U; 0 Other;
                                                                      Sequence 17 BP; 4 A; 3 C; 3 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; Page 81; 218pp; English
                                                                                                                                                                                                                                                                                                     ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96WO-US017480,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95US-0005974P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96US-00584040.
                                                                                                                                                                                 809 TCCAACTCAGGGTTG 823
                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC. (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                   AAX69863 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                              9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pavco P, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1997-259017/23.
                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAY-1997
                                                                                                                                                                                                                                                                                                                                        AAX69863;
                                                                                                           Query Match
                                                                                                                                                                                                                                                                    RESULT 685
                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                       AAX69863,
                                                                                                                                                                                                                                                                                                         8 8 8 8 8 8
                                                                                                                                                                                                                g
                                                                                                                                                                                 ð
```

```
The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (WEGF). A patient (preferably human) having a condition associated with the level of the fims-like tyrosine kinase 1 (fll-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour analogenesis, coular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene expression or mRNA
                                                                                                                                                                                                           Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic acid molecule modulating VEGF receptor(s) gene expression or
stability - useful for treating e.g. tumour angiogenesis, psoriasis,
rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .,
                                                                                                                                                                                Human flt1 VEGF receptor hammerhead ribozyme substrate #934.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17; 66.7%; Pred. No. 6.4e+02; tive 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 3 A; 5 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 74; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    875
                                                                                                                                                                                                                                                                                                                                                                                                              96WO-US017480.
                                                                                                                                                                                                                                                                                                                                                                                                                                             95US-0005974P.
96US-00584040.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 cuccaguudegacuc 16
                                                                                 AAX69639 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC. (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX72737 standard; RNA; 17
16 GACTCCAGATGGAAC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-JUL-1999 (first entry)
                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                            foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 66.7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    861 CTCCAGTTGGAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                              WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                              25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                             26-OCT-1995;
11-JAN-1996;
                                                                                                                                                   28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                              01-MAY-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX72737;
                                                                                                                 AAX69639;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 687
                                                 RESULT 686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX72737
                                                                   AAX6963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  XXXX
                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ઠે
```

ö

0

Gaps

; 0

Match 4.1%; Score 11.8; DB 1; Length 17; Local Similarity 86.7%; Pred. No. 6.4e+02; es 13; Conservative 0; Mismatches 2; Indels

Query Match

Matches

```
(RIBO-) RIBOZYME PHARM INC. (CHIR ) CHIRON CORP.
WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 689
AAX72738/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THE STATE OF THE S
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fims-like tyrosine kinase 1 (fl-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
                                                                                          Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      stability – useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #171.
                                 Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #170.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 17; 00.0%; Pred. No. 6.4e+02; ve 4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seguence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 4; Page 127; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX72738 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96WO-US017480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95US-0005974P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96US-00584040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           871 AACACTTTCCTGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |||| |:::||:| ||
AACCCUUUCCUGGGA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC. (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                  foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pavco P, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1997-259017/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                              WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                             01-MAY-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX72738;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus sp
```

RESULT 688

Matches

ò

```
The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (WEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour anglogenesis, coular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acid molecule modulating VEGF receptor(s) gene expression or stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #171.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 17; 60.0%; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 3 A; 6 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4; Mismatches
                                                                                                                                                                                                                                                                                             Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 4; Page 127; 218pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX72738 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95US-0005974P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96WO-US017480
                                                       96WO-US017480.
                                                                                                                 95US-0005974P.
96US-00584040.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 871 AACACTTTCCTGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACCCUUUCCUGGGA 15
                                                                                                                                                                                                          PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9; Conservative
                                                                                                                                                                                                                                                                                                   Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-259017/23
                                                                                                                                                                                                                                         CHIR ) CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                          (RIBO-) RIBOZYME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-0CT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-JAN-1996;
                                                                                                                 26-OCT-1995;
11-JAN-1996;
                                                          25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-MAY-1997
01-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX72738;
                                                                                                                                                                                                                                                                                                Pavco P,
```

ö

mRNA

```
The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (fll-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rhoumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression of nucleic acid molecules from the present invention
                                                                                                          expression or mRNA
                                                                                                    Nucleic acid molecule modulating VEGF receptor(s) gene expression or stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                        Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 3 A; 6 C; 3 G; 0 T; 5 U; 0 Other;
                      Stinchcomb D,
                                                                                                                                                                                      Claim 4; Page 127; 218pp; English
                      Mcswiggen J,
                                                              WPI; 1997-259017/23
                      Pavco P,
```

```
4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02;
                              2; Indels
                              0; Mismatches
                                                         710 AGTCCCAGGAGAGTG 724
                                                                                      17 AGTCCCAGGAAAGGG 3
                            13; Conservative
            Best Local Similarity
Query Match
                            Matches
                                                           à
                                                                                      g
```

BP AAX73031 standard; RNA; 17 28-JUL-1999 (first entry) AAX73031; RESULT

Vascular endothelial growth factor receptor; VBGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tummour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #464. foetal liver kinase 1; ss.

96WO-US017480 95US-0005974P WO9715662-A2 25-OCT-1996; 26-OCT-1995; 01-MAY-1997. Mus sp. 

96US-00584040 (RIBO-) RIBOZYME PHARM INC 11-JAN-1996;

Stinchcomb D, Mcswiggen J, (CHIR ) CHIRON CORP. Pavco P,

WPI; 1997-259017/23.

Escobedo J;

Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.

Claim 4; Page 137; 218pp; English.

```
·;
The present invention describes nucleic acid molecules which modulate the
                                                                                                                                                            can pe
                     synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VBGF). A patient (preferably human) having a condition associated with the level of the fims-like tyrosine kinase 1 (flt-l), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-l) (e.g. tumour anglogenesis, coular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                  .,
                                                                                                                                                                                                                                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                                                                                                                                    Sequence 17 BP; 4 A; 3 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                        Query Match 4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                791 TGGTGCCAAGAGCTC 805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16 rcargccaagaacrc 2
                                                                                                                                                                                                                                                                                                                                                                                       Matches 13; Conservative
8.8.6.6.6.6.6.6.6.6.6.6.6.6.6
                                                                                                                                                                                                                                                                                                                                                                                                                                              ò
```

Human, epidermal growth factor receptor; EGFR; EGF-R; target sequence; hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation; cancer; genetic drift; detection; mutation; ss. Human EGF-R target sequence nucleotide position 339. Homo sapiens 

BP.

AAV97255 standard; RNA; 17

RESULT 691 AAV97255 (first entry)

17-MAR-1999

AAV97255;

0

Gaps

·,

97US-0036476P. 97US-00985162. 98WO-US000730 WO9833893-A2 14-JAN-1998; 31-JAN-1997; 04-DEC-1997; 06-AUG-1998.

Mcswiggen JA; Fell P, WPI; 1998-437449/37. Akhtar S,

(RIBO-) RIBOZYME PHARM INC. (UYAS-) UNIV ASTON.

Enzymatic nucleic acids - which cleave RNA derived from an epidermal growth factor receptor, useful for inhibiting cell proliferation and for treating cancers.

Claim 5; Page 68; 109pp; English.

The present invention describes enzymatic nucleic acid molecules (NAMs) which specifically cleave RNA derived from an epidermal growth factor receptor (BCR-R) gene. AAV07221 to AAV08044 and AAV08049 to AAV09000 represent specifically claimed target sequence from human EGP-R. AAV090044 to AAV98066 and AAV98067 to V9078 represent hammerhead ribozymes and hairpin ribozymes respectively for human BGF-R. The NAMs are useful for cleaving BGP-R RNA in the treatment of a condition associated with EGFR expression levels e.g. to inhibit cell proliferation in the prevention or treatment of cancers. The NAMs can also be used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of EGF-R RNA in a cell

Seguence 17 BP; 4 A; 6 C; 4 G; 0 T; 3 U; 0 Other;

Human; IL-2 receptor g-chain; interleukin 2 receptor gamma chain; hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer; autoimmune disease; psoriasis; allergy; inflammatory disease;

graft rejection; ss.

WO9824913-A2

Mus sp.

Mouse IL-2 receptor g-chain substrate position 1098.

(first entry)

24-FEB-1999

AAV95036 standard; RNA; 17 BP.

```
The present invention describes enzymatic nucleic acid molecules (NAMS) which specifically cleave RNA derived from an epidermal growth factor receptor (EGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090 represent specifically claimed target sequence from human EGF-R. AAV98044 to AAV98866 and AAV98867 to V9978 represent hammerhead ribozymes and hairpin ribozymes respectively for human EGF-R. The NAMS are useful for cleaving EGF-R RNA in the treatment of a condition associated with EGFR expression levels e.g. to inhibit call proliferation in the prevention or trreatment of cancers. The NAMS can also be used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of EGF-R RNA in a cell
                                 ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Enzymatic nucleic acids - which cleave RNA derived from an epidermal growth factor receptor, useful for inhibiting cell proliferation and for treating cancers.
                                                                                                                                                                                                                                                                                                                            Human; epidermal growth factor receptor; EGFR; EGF-R; target sequence; hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation; cancer; genetic drift; detection; mutation; ss.
                                 Gaps
                                 .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.1%; Score 11.8; DB 1; Length 17; 66.7%; Pred. No. 6.4e+02; tive 3; Mismatches 2; Indels
 Length 17;
4.1%; Score 11.8; DB 1; Length 1 73.3%; Pred. No. 6.4e+02; ative 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                            Human EGF-R target sequence nucleotide position 2957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 3 A; 8 C; 2 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 5; Page 75; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mcswiggen JA;
                                                                                                                                                                                          BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98WO-US000730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0036476P.
97US-00985162.
                                                                     929 CACCCTCCAGAGAAT 943
                                                                                                    3 cagccuccadaddau 17
                                                                                                                                                                                          AAV97557 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (RIBO-) RIBOZYME PHARM INC. (UYAS-) UNIV ASTON.
                                                                                                                                                                                                                                                              (first entry)
   Query Match
Best Local Similarity 73.3
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-437449/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Akhtar S, Fell P,
                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-JAN-1997;
04-DEC-1997;
                                                                                                                                                                                                                                                              17-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9833893-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-AUG-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                            AAV97557;
                                                                                                                                                           RESULT 692
                                                                                                                                                                         g
```

```
The present sequence invention describes ribozymes targeted to modulate the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA. AAV93889 to AAV94574 represent specifically claimed ribozymes, and AAV95250 represent specifically claimed substrate sequences from the present invention. The ribozymes can be used for the treatment of, e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy and other inflammatory conditions. The ribozymes are also used to induce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    inflammatory conditions. The ribozymes are also used to induce
                                                                                                                                                                                                                                                                                                                                                                                       Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer, autoimmune disease and allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; IL-2 receptor g-chain; interleukin 2 receptor gamma chain; hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer; autoimmune disease; psoriasis; allergy; inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 17;
10.0%; Pred. No. 6.4e+02;
ive 7; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   tolerance in a recipient to alloantigen from a donor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human IL-2 receptor g-chain substrate position 335.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 4 A; 3 C; 3 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 4; Page 43; 61pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                       97WO-US021748.
                                                                                                                                                                                                                                                                                                                                     Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            834 TTTTCTTCTCTGAAG 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV94629 standard; RNA; 17
                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6; Conservative
                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-333332/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          graft rejection; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                    Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO9824913-A2.
                                                                                                                                                                                                                                                         02-DEC-1997;
                                                                                                                                                                                                                                                                                  03-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-FEB-1999
                                                                                                                                                                                                                              11-JUN-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV94629;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV94629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      d
```

.; 0

Gaps

.. 0

800 GAGCTCTCCTCCAAC 814

Conservative

Best Local Similarity

10;

Matches

||| :|:||:||| | GAGAUCUCCUCCAUC 16

g Š

RESULT 693 AAV95036

ö

97WO-US021748 96US-00758306

11-JUN-1998

Mcswiggen JA;

·.

Gaps

```
Mouse IL-2 receptor g-chain substrate position 1097.
                                                                                                                                                                           Sequence 17 BP; 5 A; 3 C; 2 G; 0 T; 7 U; 0 Other;
                                                                                      autoimmune disease and allergies.
                                                                                                   Claim 4; Page 34; 61pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; Page 43; 61pp; English.
                                                                                                                                                                                                                   835 TTTCTTCTCTGAAGA 849
                                                                                                                                                                                                                          : :: |: |: | | | | | | | | | | | UCUAUUCUCUGAAGA 17
                                       (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                AAV95035 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                       (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                      7; Conservative
                                                                  WPI; 1998-33332/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-33332/29.
                                                                                                                                                                                                                                                                                                                                          graft rejection; ss.
                                                                                                                                                                                         Query Match
Best Local Similarity
                                                    Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                     Stinchcomb DT,
            02-DEC-1997;
                          03-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                   WO9824913-A2
                                                                                                                                                                                                                                                                                                                                                                                                          03-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                              02-DEC-1997;
                                                                                                                                                                                                                                                                                           24-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                11-JUN-1998.
                                                                                                                                                                                                                               3
                                                                                                                                                                                                                                                                              AAV95035;
                                                                                                                                                                                                                                                   RESULT 695
                                                                                                                                                                                               Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                      Mus
                                                                                                                                                                                                                                                          AAV95035
à
                                                                                                                                                                                                                               d
```

4.18;

BP.

(first entry)

97WO-US021748

96US-00758306

Mcswiggen JA;

```
the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA. ANY93889 to ANY94574 represent specifically claimed ribozymes, and AAV94675 to AAV95260 represent specifically claimed substrate sequences from the present invention. The ribozymes can be used for the treatment of, e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy and other inflammatory conditions. The ribozymes are also used to induce tolerance in a recipient to alloantigen from a donor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present sequence invention describes ribozymes targeted to modulate the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA. AAV93889 to AAV94574 represent specifically claimed ribozymes, and AAV94575 to AAV95260 represent specifically claimed substrate sequences from the present invention. The ribozymes can be used for the treatment of, e.g. graff rejection, autoimmune disease, cancer, psoriasis, allergy and other inflammatory conditions. The ribozymes are also used to induce tolerance in a recipient to alloantigen from a donor
The present sequence invention describes ribozymes targeted to modulate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer, autoimmune disease and allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, IL-2 receptor g-chain; interleukin 2 receptor gamma chain; hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer; autoimmune disease; psoriasis; allergy; inflammatory disease;
                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17;
40.0%; Pred. No. 6.4e+02;
ive 7; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17;
46.7%; Pred. No. 6.4e+02;
tive 6; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mouse IL-2 receptor g-chain substrate position 1100.
                                                                                                                                                                                                  Sequence 17 BP; 4 A; 3 C; 3 G; 0 T; 7 U; 0 Other,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 3 A; 4 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 4; Page 43; 61pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mcswiggen JA;
                                                                                                                                                                                                                                                                  40.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96US-00758306,
                                                                                                                                                                                                                                                                                                                                        834 TTTTCTTCTGAAG 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97WO-US021748.
                                                                                                                                                                                                                                                                                                                                                                : :: ::|:||||||
UGUUAUUCUCUGAAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV95037 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                  Local Similarity 40.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ouery Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                graft rejection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1998-33332/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9824913-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-JUN-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV95037;
                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus sp.
                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV95037
ò
                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                    The present sequence invention describes ribozymes targeted to modulate the synthesis and/or expression of interleukin (IL)-2R gamma encoded RNA. AAA93889 to AAA94574 represent specifically claimed ribozymes, and AAA95875 to AAA95260 represent specifically claimed substrate sequences from the present invention. The ribozymes can be used for the treatment of, e.g. graft rejection, autoimmum disease, canner, psoriasis, allergy and other inflammatory conditions. The ribozymes are also used to induce tolerance in a recipient to alloantigen from a donor
                                                                                                                                                                                                                                                           Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer, autoimmune disease and allergies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, IL-2 receptor g-chain, interleukin 2 receptor gamma chain; hammerhead ribozyme, hairpin ribozyme; substrate; expression; cancer; autoimmune disease; psoriasis; allergy; inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 11.8; DB 1; Length 17;
Pred. No. 6.4e+02;
6; Mismatches 2; Indels
```

0

Gaps

836 TICTICICIGAAGAC 850

ò

UNAUUCUCUGAAGCC 16

AAA19027 standard; RNA; 17 BP 

AAA19027;

19-JUN-2000 (first entry)

Human TIE-2 substrate sequence SEQ ID NO:2253.

Human; aryl hydrocarbon nuclear transport, ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration, psoriasis, verruca vulgaris, angiofibroma, tuberous sclerosis, pct-wine stain, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome; ss.

Homo sapiens.

W09950403-A2

07-0CT-1999.

99WO-US006507. 24-MAR-1999;

98US-0079678P 27-MAR-1998;

(RIBO-) RIBOZYME PHARM INC.

Mcswiggen JA; Coeshott C, Jarvis T, Roberts E, Pavco PA,

WPI; 1999-591315/50.

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

Claim 56; Page 132; 305pp; English.

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17165 and AAA17165 to AAA17681 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19086 and AAA19155 to AAA19152 represent their corresponding target sequences; CC AAA19152 to AAA1922 represent their corresponding target sequences; CC and AAA1922 represent their corresponding target sequences; AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme sequences; AAA1689 to AAA20361 and AAA21501 to AAA21362 to AAA23343 to AAA21689 to AAA21689 represent their corresponding target sequences; AAA21689 to AAA21689 represent their corresponding target sequences; AAA21689 to AAA21683 represent their corresponding target sequences; AAA21689 to AAA21683 represent their corresponding target sequences; AAA21689 to AAA21683 to AAA23262, AAA23343 to AAA2342 represent their corresponding target sequences; Cfor integrin subunit beta 3, and AAA23476 to AAA23362, AAA23343 to the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARWI, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related to macular degeneration (ARWI), inflammation, and arthritis, as well as engicibroma of tubercus sclerosis, pot-wine stains, Sturge Weber cyndromes and diseases related to the levels of ARNI, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3 integrin subun

Sequence 17 BP; 0 A; 4 C; 0 G; 0 T; 13 U; 0 Other;

; 0 Gaps .. 0 Indels Pred. No. 6.4e+02; ); Mismatches 2; 20.0%; Prec Conservative Best Local Similarity Matches 3; Conserv

830 TCTCTTTTCTTCT 844 ò

2 UUUCUUUUCUUUUCU 16 q

RESULT 698 AAA20988,

AAA20988 standard; RNA; 17 BP

AAA20988;

(first entry) 19-JUN-2000 Integrin alpha 6 subunit substrate sequence SEQ ID NO:4214.

integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostaric; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antiposriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriaais; vertuca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Ss. Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss. Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis;

WO9950403-A2

07-0CT-1999

99WO-US006507. 24-MAR-1999; 98US-0079678P. 27-MAR-1998;

RIBO-) RIBOZYME PHARM INC.

Mcswiggen JA; Coeshott C, Jarvis T, Pavco PA, Roberts E,

WPI; 1999-591315/50.

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an anglogenic factors.

Claim 55; Page 180; 305pp; English.

the present invention to tescribes enzymatic nucleic action molecules with KNA cleaving activity, which specifically cleave RNA encoded by an arryl hydrocarbon nuclear transporter (ARNT) gene, an integrin submit beta 3 cene, an integrin alpha 6 submit gene, or a Tie-2 gene AAA1761 to AAA1762 represent ribozyme sequences for ARNT, and AAA1766 to AAA17650 and AAA17684 represent their corresponding target sequences; AAA17685 to AAA19885 to AAA19885 to AAA19822 represent their corresponding target sequences; AAA19223 to AAA19222 represent their corresponding target sequences; AAA19223 to AAA21861 and AAA21801 to AAA21895 represent ribozyme sequences; AAA19223 to AAA21868 encorresponding target sequences; AAA19223 to AAA21868 encorresponding target sequences; AAA18923 to AAA21689 to AAA21689 represent their corresponding target sequences; AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences; AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequences; Cor integrin submit beta 3, and AAA22476 to AAA23243 hat ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, cor filed to treat cancer, diabetic retinopathy, age related macular degeneration (ARND), inflammation, and arthritis, as well as corpusation and tuberous solerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, The present invention describes enzymatic nucleic acid molecules with RNA

SXXC

qq

ð

```
à
                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                               8888888888
                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA1575 to AAA17677 and AAA1761 to AAA1762 represent ribozyme sequences for ARNT, corresponding target sequences; AAA1683 to AAA1888 and AAA1908 and AAA19154 represent ribozyme sequences for Tie-2, and AAA1908 and AAA19155 to AAA1922 represent their corresponding target sequences; AAA18236 to AAA1908 and AAA1923 represent their corresponding target sequences; AAA18236 to AAA1928 and AAA1923 represent their corresponding target sequences;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequences for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA21596 to AAA21688 represent their corresponding target sequences; AAA21689 to AAA22475 and AAA23263 to AAA23342 represent ribozyme sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for integrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel ribozymes for modulating the synthesis, expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antidiflammatory; antiarthritic; antipsoriatic; ARWD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; poerviasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                             Gaps
                                                                                                                             .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mcswiggen JA;
                                                                                 Length 17;
                                                                                                                          2; Indels
integrin subunit alpha-6, or integrin subunit beta-3
                                         Sequence 17 BP; 7 A; 2 C; 3 G; 0 T; 5 U; 0 Other;
                                                                               Score 11.8; DB 1;
Pred. No. 6.4e+02;
); Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Human TIE-2 substrate sequence SEQ ID NO:1689.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 56; Page 96; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jarvis T,
                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                   AAA18463 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US006507.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0079678P.
                                                                                   4.1%;
86.7%;
                                                                                                                                                                      959 CCAAATTGACTCTCT 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                            ccaaarrgaarrrcr 2
                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                             13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pavco PA, Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1999-591315/50.
                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9950403-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                    19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                             AAA18463;
                                                                                                                                                                                                              16
                                                                                   Query Match
                                                                                                                                                                                                                                                                           RESULT 699
                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                 AAA18463
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA1767 and AAA17661 to AAA1622 represent ribozyme sequences for ARNT, and AAA17661 and AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA1885 and AAA419087 to AAA19125 to AAA19222 represent their corresponding target sequences; AAA17685 to AAA19223 to AAA19222 represent their corresponding target sequences; AAA19223 to AAA21968 to AAA19223 to AAA21969 to AAA19223 to AAA21861 to AAA21595 represent ribozyme AAA21896 to AAA21868 represent their corresponding target sequences; AAA21869 to AAA21868 represent their corresponding target sequences; AAA21869 to AAA21868 represent their corresponding target sequences for integrin subunit beta 3, and AAA22476 to AAA23362, AAA23343 to Titegrin subunit beta 3, and AAA22476 to AAA23262, AAA23343 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention describes enzymatic nucleic acid molecules with RNA
macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, pscriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; autiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruea vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss. Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 6.4e+02;
1; Mismatches 2;
                                                                                                                                                                                                                                                                                             Seguence 17 BP; 4 A; 2 C; 9 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human TIE-2 substrate sequence SEQ ID NO:2252.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 56; Page 132; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Jarvis I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAA19026 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99WO-US006507.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0079678P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    707 GCGAGTCCCAGGAGA 721
                                                                                                                                                                                                                                                                                                                                                                                                               80.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 ścickiewickiek 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 80.0
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-591315/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9950403-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA19026;
                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA19026
```

```
AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes, and diseases related to the levels of ARNT, Tie-2,
                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                          Length 17;
                                                                                                                                                                                                                                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                             integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                            Sequence 17 BP; 1 A; 3 C; 0 G; 0 T; 13 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                        Score 11.8; DB 1;
Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                      10; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                     830 TCTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                              Local Similarity 20.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 UUUCUUUUCUUUUCU 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA19028 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                         3; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA19028;
                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                         Matches
         55555555555%&
                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
```

. 0

Human; aryl hydrocarbon nuclear transport; ARNT; TIB-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhaad ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; vertuca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss. Human TIE-2 substrate sequence SEQ ID NO:2254. Homo sapiens 

99WO-US006507 WO9950403-A2 07-OCT-1999.

98US-0079678P. 27-MAR-1998;

(RIBO-) RIBOZYME PHARM INC.

Mcswiggen JA; Coeshott C, Jarvis T, Roberts E, Pavco PA,

WPI; 1999-591315/50.

56; Page 132; 305pp; English. Claim

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (RNRT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17561 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17650 and AAA17623 to AAA17684 represent their corresponding target sequences; AAA17654 to AAA18986 to AAA19086 and AAA19154 represent ribozyme sequences for Tie-2, and AAA19087 to AAA19155 to AAA19222 represent their corresponding target sequences;

sequences for integrin alpha 6 subunit, and AAA20362 to AAA21600 and AAA21569 to AAA21688 represent their corresponding target sequences; AAA21689 to AAA22468 represent their corresponding target sequences; for integrin subunit beta 3, and AAA22476 to AAA23362, AAA2343 to AAA23422 represent their corresponding target sequences. The ribozymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as necovascular glaucoma, myopic degeneration, psoriasis, vertuca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2. AAA19223 to AAA20361 and AAA21501 to AAA21595 represent ribozyme integrin subunit alpha-6, or integrin subunit beta-3  $\mathcal{G}_{\mathcal{G}}^{\mathcal{G}}(\mathcal{G}_{\mathcal{G}}) = \mathcal{G}_{\mathcal{G}}^{\mathcal{G}}(\mathcal{G}_{\mathcal{G}}) + \mathcal{G}$ 

4.1%; Score 11.8; DB 1; Length 17; 0.0%; Pred. No. 6.4e+02; ve 10; Mismatches 2; Indels Sequence 17 BP; 0 A; 4 C; 0 G; 0 T; 13 U; 0 Other; 830 TCTCTTTTCTTCT 844 20.0%; Local Similarity 20.0% es 3; Conservative Query Match Best Loca Matches

·;

Gaps

.;

RESULT 702 AAA36409

: :|:::|: 1 UUUCUUUUCUUUUCU 15

ð

AAA36409 standard; DNA; 17 AAA36409; 

ВР

Human genomic SNP allele specific oligonucleotide SEQ ID NO:475. (first entry) 26-JUL-2000

Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis; allele specific ollogonucleotide; ASO; reduced complexity genome; RCG; genomic classification; identification; by fingerprinting; tumour characterisation; hybridisation; ss.

Homo sapiens.

WO200018960-A2.

24-SEP-1999; 06-APR-2000

98US-0101757P 25-SEP-1998;

Charest A; (MASI ) MASSACHUSETTS INST TECHNOLOGY. Housman DE, Jordan B, Landers JE,

WPI; 2000-293181/25.

preparation and analysis of reduced complexity genomes, useful for genotyping, fingerprinting and determining allele frequency of SNPs. Detection of single nucleotide polymorphisms in genomes by

Disclosure; Page 67; 111pp; English.

SNP A method has been developed for detecting the presence or absence of a single nucleotide polymorphism (SNP) allele in a genomic sample. The method comprises preparing a reduced complexity genome (RCG) from the genomic sample and analysing the RCG for the presence or absence of a sallele. The method can be used to characterise a tumour, to generate a genomic pattern for an individual genome or to generate a genomic classification code for a genome. The method can be used to assess whether a subject is at risk for developing a disease or to identify a

```
.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A method has been developed for detecting the presence or absence of a single nucleotide polymorphism (SNP) allele in a genomic sample. The method comprises preparing a reduced complexity genome (RCG) from the genomic sample and analysing the RCG for the presence or absence of a SNP allele. The method can be used to characterise a tumour, to generate a genomic pattern for an individual genome or to generate a genomic classification code for a genome. The method can be used to assess whether a subject is at risk for developing a disease or to identify a set of SNP alleles associated with a disease. The method can also be used to perform linkage analysis. AAA35944 to AAA35947 represent sequences used in the exemplification of the present invention. AAA35948 to
 nseq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Detection of single nucleotide polymorphisms in genomes by preparation and analysis of reduced complexity genomes, useful for genotyping, fingerprinting and determining allele frequency of SNPs.
The method can also be 1
1947 represent sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; single nucleotide polymorphism; SNP; genotyping; DNA analysis; allele specific ollogonucleotide; ASO; reduced complexity genome; RCG; genomic classification; identification; DNA fingerprinting; tumour characterisation; hybridisation; ss.
                                                                                                                                                                        Gaps
 set of SNP alleles associated with a disease. The method can also to perform linkage analysis. AAA35944 to AAA35947 represent sequenused in the exemplification of the present invention. AAA35948 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human genomic SNP allele specific oligonucleotide SEQ ID NO:494
                                                                                                                                                                      .,
                                                                                                                                 Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 4.1%; Score 11.8; DB 1; Length 1 Best Local Similarity 86.7%; Pred, No. 6.4e+02; Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                    2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA36632 represent nucleotide sequences containing SNPs
                                                      AAA36632 represent nucleotide sequences containing SNPs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 4 A; 3 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                             Sequence 17 BP; 2 A; 4 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                   DB 1;
                                                                                                                             Score 11.8; DB 1;
Pred. No. 6.4e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Charest A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MASI ) MASSACHUSETTS INST TECHNOLOGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 67; 111pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Housman DE,
                                                                                                                   4.1%; Scor.
86.7%; Pred
                                                                                                                                                                                                                                                                                                                                      AAA36428 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US022283.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0101757P
                                                                                                                                                                                                         832 TCTTTTCTCTGA 846
                                                                                                                                                                                                                                            rerrererrerran 16
                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jordan B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-293181/25
                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200018960-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                   26-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-APR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Landers JE,
                                                                                                                                                                        13;
                                                                                                                                                                                                                                                                                                                                                                             AAA36428;
                                                                                                                                                                                                                                          N
                                                                                                                                   Query Match
                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                       AAA36428/
                                                                                                                                                                                                                                                                                                     RESULT
                                                                                                                                                                                                                                                                                                                                                                           8888888
                                                                                                                                                                                                             à
                                                                                                                                                                                                                                            셤
```

```
A method has been developed for detecting the presence or absence of a single nucleotide polymorphism (SNP) allele in a genomic sample. The method comprises preparing a reduced complexity genome (RCG) from the genomic sample and analysing the RCG for the presence or absence of a Stallele. The method can be used to characterise a tumour, to generate a genomic pattern for an individual genome or to generate a genomic classification code for a genome. The method can be used to assess whether a subject is at risk for developing a disease or to identify a set of SNP alleles associated with a disease. The method can also be use to perform linkage analysis. AAA35944 to AAA3547 represent sequences used in the exemplification of the present invention. AAA35948 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Detection of single nucleotide polymorphisms in genomes by preparation and analysis of reduced complexity genomes, useful for genotyping, fingerprinting and determining allele frequency of SNPs.
                                                                                                                                                                                                                                       Human, single nucleotide polymorphism; SNP; genotyping; DNA analysis; allele specific oligonucleotide; ASO; reduced complexity genome; RCG; genomic classification; identification; DNA fingerprinting; tumour characterisation; hybridisation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                        Human genomic SNP allele specific oligonucleotide SEQ ID NO:495.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAA36632 represent nucleotide sequences containing SNPs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 4 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 6.4e+02;
live 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Charest A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MASI ) MASSACHUSETTS INST TECHNOLOGY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Housman DE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 67; 111pp; English.
                                                                                                       AAA36429 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US022283.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0101757P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  766 CCTCCACTTCTGAGG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA25146 standard; DNA; 17
                   2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19-JUL-2000 (first entry)
                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 cércecrréceage
CCTCCCTTCCGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Jordan B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2000-293181/25.
                                                                                                                                                                                                                                                                                                                                                            WO200018960-A2
                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                 24-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-SEP-1998;
                                                                                                                                                                       26-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Landers JE,
                                                                                                                                                                                                                                                                                                                                                                                                06-APR-2000
                                                                                                                                        AAA36429;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA25146;
                     16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA25146/c
                                                                     RESULT 704
                                                                                        AAA36429/
                     Dp:
                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A X X X E X
```

ö

ö

Gaps

..

766 CCTCCACTTCTGAGG 780

à

nseq

äNS

```
The present invention describes nucleic acids (A) that interact stably with a target sequence and contain at least one phosphoro(di)thioate with a target sequence and contain at least one phosphoro(di)thioate clink, having endonuclease activity. (A), and more generally any catalytic nucleic acid (A') that modulates expression of the oestrogen receptor. Gene, are used to treat cancer (particularly of breast or endometrium), compared to transforming cells ex vivo and implanting treated cells, or for other conditions associated with levels of oestrogen receptor. Because of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, particularly for identification of therapeutic targets, and as research reagents (for RNA, in the same way that restrictions in (A) improves used with DNA). The combination of modifications in (A) improves ceptatesiance to nucleases, binding affinity and/or activity. AAA23503 to AAA24747 represent oestrogen receptor haripin ribozyme sequences.

CC AAA24748 to AAA25992 represent their corresponding target sequences.

CC AAA24748 to AAA25992 represent their corresponding target sequences.

CC AAA25953 to AAA26105 represent their corresponding target sequences.

CC AAA256105 represent oestrogen receptor haripin ribozyme sequences and antisense oligonucleotides used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     nucleic acids that interact, and optionally cleave, target sequences,
Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1644.
                                     Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide; gene expression modification; cancer; phosphorothioate; endonuclease; anticancer; breast cancer; endometrium cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 4 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 77; Page 69; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                    Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF04293 standard; DNA; 17 BP
                                                                                                                                                                                                                                                            99WO-US008547.
                                                                                                                                                                                                                                                                                                                     98US-00103636.
                                                                                                                                                                                                                                                                                                 98US-0082404P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACTCTCTAAATCTG 980
                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17 GACACTCTGAATCTG 3
                                                                                                                                                                                                                                                                                                                                                                                                  Thompson JD, Beigelman L, Reynolds M, Zwick M, Jar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            used to treat cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-013248/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                           Matulic-Adamic J;
                                                                                                                                          Homo sapiens.
                                                                                                                                                                               WO9954459-A2
                                                                                                                                                                                                                                                            19-APR-1999;
                                                                                                                                                                                                                                                                                                                     23-JUN-1998;
                                                                                                                                                                                                                    28-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF04293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 706
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF04293/c
ID AAF04
XX
AC AAF04
XX
XX
DT 16-FE
XX
XX
XX
XX
XX
XX
XX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New
  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
```

Bellon L;

Mcswiggen JA, Karpeisky A, is T, Woolf T, Haeberli P;

```
The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, ERA3/COUP-TF-1, the GATA transcription factor gene, IRR-2 and/or the CAATT Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoietin, granulocyte colony stimulating factor protein and interferon alpha
                                                                                                                                                                                                                                              Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ribozyme; erythropoietin; granulocyte colony stimulating factor; interferon alpha; ss.
Ribozyme; erythropoietin; granulocyte colony stimulating factor; interferon alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 7 A; 4 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                             Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hammerhead ribozyme substrate #1810.
                                                                                                                                                                                                                                                                                                Claim 4; Page 97; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                11-APR-2000; 2000WO-US009721.
                                                                                                                                                                                            Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pavco P,
                                                                                                                                          99US-0129390P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-APR-2000; 2000WO-US009721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0129390P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF04294 standard; DNA; 17
                                                                                                                                                                    (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 86.7 es 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        864 CAGTIGGAACACITT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 CAGTIGGAAGAITTI
                                                                                                                                                                                                                    WPI; 2000-647423/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-647423/62
                                                                                                                                                                                            Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zwick M,
                                                              WO200061729-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200061729-A2
                                                                                                                                          12-APR-1999;
                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-FEB-2001
                                                                                        19-0CT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF04294;
                                                                                                                                                                                            Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF04294/c
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               셤
```

.; 0

Gaps

ö

Indels

Mismatches

; 0

Hammerhead ribozyme substrate #1809.

(first entry)

16-FEB-2001

Score 11.8; DB 1; Length 17; Pred. No. 6.4e+02;

ô

· 0

```
Ribozyme, erythropoietin; granulocyte colony stimulating factor; interferon alpha; ss.
                                                                                                           Sequence 17 BP; 6 A; 4 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                              Hammerhead ribozyme substrate #2258.
                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 107; 164pp; English.
                                 Claim 4; Page 97; 164pp; English.
                                                                                                                                                                                                                                                                                                                        11-APR-2000; 2000WO-US009721
                                                                                                                                                                                                                                                                                                                                                                  Blatt L, Zwick M, Pavco P,
                                                                                                                                                                                                                                                                                                                                                   RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                     AAF04742 standard; DNA; 17
                                                                                                                                                                                                                                16-FEB-2001 (first entry)
                                                                                                                                Local Similarity 86.7
les 13, Conservative
                                                                                                                                                    864 CAGTTGGAACACTTT
                                                                                                                                                                  15 CAGTIGGAAGAITIT
                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-647423/62.
                                                                                                                                                                                                                                                                                             WO200061729-A2
                                                                                                                                                                                                                                                                                                                                       12-APR-1999;
                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                           19-0CT-2000.
                                                                                                                                                                                                                   AAF04742;
                                                                                                                           Query Match
                                                                                                                                                                                        RESULT 708
                                                                                                                                       Matches
                                                                                                                                                                                               AAF04742/
                                                                                                                                                                                                                   à
                                                                                                                                                                  g
```

2; Indels

Score 11.8; DB 1; Pred. No. 6.4e+02; 0; Mismatches 2;

. 0

878

4.1%;

BP.

```
consequently increases expression of) genes involved in the production of erythropoietin, granulocyte colony stimulating factor protein and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF1, the GATA transcription factor gene, IRF-2 and/or the CAATI Displacement Protein (CDF). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                      Ribozyme; erythropoietin; granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ive 0; Mismatches 2; Indels
              Length 17;
                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 1 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
            Score 11.8; DB 1; Pred. No. 6.4e+02; O; Mismatches 2;
4.1%; Sco...
86.7%; Pred. No. co...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hammerhead ribozyme substrate #2257.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 37; Page 56; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                Hammerhead ribozyme substrate #11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                         AAF01716 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-APR-2000; 2000WO-US009721.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-0129390P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         751 CCCAGGGTCCCTAGG 765
                                                                                               864 CAGTIGGAACACITT 878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF04741 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cccAgggAccccAgg 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 13; Conservative
                                                       13; Conservative
                                                                                                                                       15 CAGTTGGAAGATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                           interferon alpha; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-647423/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 interferon alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200061729-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-FEB-2001
                                                                                                                                                                                                                                                                                                                            16-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-0CT-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAF04741;
                                                                                                                                                                                                                                                                                   AAF01716;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 710
                                                                                                                                                                                                       RESULT 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF04741/

ID AAF0.

XX AAF0

XX DT 16-F

XX DE Hamm
                                                           Matches
                                                                                                                                                                                                                              AAF01716/
                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                       g
                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, ERR3/COUP-TF-1, the GATA transcription factor gene, IRF-2 and/Or the CAATT Displacement Protein (CDF). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of exythropoletin, granulocyte colony stimulating factor protein and
                                                                                                                                                    The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription factor gene, IRF-2 and/or the CAATT Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoietin, granulocyte colony stimulating factor protein and interferon alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                 Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                               ·,
                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
```

0

Sequence 17 BP; 6 A; 4 C; 2 G; 5 T; 0 U; 0 Other;

Mcswiggen J;

99US-0129390P

```
0
                                                                                                                                                                                                                                                                                                                                                      The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription factor gene, IRR-2 and/or the CAATI Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoletin, granulocyte colony stimulating factor protein and interferon alpha
                                                                                                                                                                                                                                                                     Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gonucleotide array; genotyping; single base extension reaction; SBE; primer; polymorphic locus; single nucleotide polymorphism; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
            Ribozyme; erythropoietin; granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 11.8; DB 1; Length 17; Pred. No. 6.4e+02; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Forward primer #76 used in multiplexing PCR/SBE assay.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 7 A; 4 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                     Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (WHED ) WHITEHEAD INST BIOMEDICAL RES. (AFFY-) AFFYMETRIX INC.
                                                                                                                                                                                                                                                                                                                               Claim 4; Page 107; 164pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-0126473P.
99US-0140359P.
                                                                                                                                                                                                                   Zwick M, Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-MAR-2000; 2000WO-US008069.
                                                                                                                                  11-APR-2000; 2000WO-US009721.
                                                                                                                                                              99US-0129390P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 86.7%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  864 CAGTIGGAACACITI 878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              standard; DNA; 17
                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGTIGGAAGATITI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide array;
                           interferon alpha; ss
                                                                                                                                                                                                                                               WPI; 2000-647423/62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200058516-A2
                                                                              WO200061729-A2
                                                    Homo sapiens.
                                                                                                                                                             12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           23-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-OCT-2000
                                                                                                         19-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAC73373;
                                                                                                                                                                                                                   Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAC73373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chk1) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chk1 levels,
                                                                                                                                                                          The present invention relates to an oligonucleotide array comprising array is useful for genotyping a nucleic acid sample at one or more loci array is useful for genotyping a nucleic acid sample at one or more loci via single base extension (SBE) reactions. A pair of primers is used to amplify a polymorphic locus in a sample e.g. a single nucleotide polymorphism (SNP). The present sequence is one of the primers used in the method of the present invention to amplify a polymorphic sample. The amplified nucleic acid product is then used as a template in a SBE reaction with an extension primer. The SBE reaction products are used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                          Universal array of oligonucleotides tags attached to a solid substrate along with locus-specific tagged oligonucleotides useful in genotyping using single base extension reactions.
Lockhart DJ;
                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                               .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Holman PS
                                                                                                                                                                                                                                                                                                                                                                                              Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
Lander ES,
                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                            4.1%; Score 11.8; DB 1;
16.7%; Pred. No. 6.4e+02;
ve 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Booher RN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human Chkl ribozyme substrate SEQ ID NO: 100.
Kaplan P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen J,
                                                                                                                                              Example 7; Page 56; 70pp; English.
Huang X,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 4; Page 54; 115pp; English
                                                                                                                                                                                                                                                                                                                                form the oligonucleotide array
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-FEB-2000; 2000US-0179983P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              02-FEB-2001; 2001WO-US003504
                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 86.7%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rcreaececaerce 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAH94675 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RNA cleavage; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              774 TCTGAGGGCAGCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jarvis T,
Hirschhorn JN,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (FATT/) FATTAEY A R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-496922/54.
                                              WPI; 2000-656171/63
               Sklar P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200157206-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Fattaey AR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAH94675;
             Ţ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               712
Fan J,
               Ryder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAH94675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
```

```
The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGOO). The nucleic acids may be enzymatic nucleic acids cleaving a an RNA molecule DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA cof CD20 in the presence of a divalent cation that is preferably MG^2^+.

CC CD20 in the presence of a divalent cation that is preferably MG^2^+.

CC CD20 in the presence of a divalent comprise the use of one or more cof cD20. The treatment may further comprise the use of one or more of cD20. The treatment may further comprise the use of one or more cof cD20. The treatment may further CD20 targetting nucleic acid may be used to creat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular NHL, lymphoma, leukaemia, HTV (human immunodeficiency virus) associated NHL, lymphoma, lymphoma, (NCC), immunocytoma (NMC), small B-cell lymphocytic lymphoma, immunodeficiency virus) associated NHC, mantle-cell immune thrombocytopaenia, and inflammatory arthropathy. The NOGO crayetting nucleic acid may be contacted with a cell to reduce NOGO activity of the colling a patient having a condition associated with the level of colling a patient having a condition associated with the level of colling and treat a patient having a condition associated with the level of therapies. In particular, the NOGO-targetting nucleic acid may be contacted with a cell to reduce NOGO activity of the therapies. In particular, the NOGO-targetting nucleic acid may be need to cleave, dementia, multiple sclerosis (MS),
 ;
0
                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chkl) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chkl levels, including cancer. The present sequence is an oligonucleotide described in
sequence is an oligonucleotide described in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                           checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Holman PS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 17; 56.7%; Pred. No. 6.4e+02; ved. 3; Mismatches 2; Indels
                                                                                      Length 17;
                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3; DE 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 7 A; 2 C; 4 G; 0 T; 4 U; 0 Other;
                                                    Sequence 17 BP; 7 A; 2 C; 4 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Booher RN,
                                                                                  4.1%; Score 11.8; DB 1;
66.7%; Pred. No. 6.4e+02;
cive 3; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                         Human Chki ribozyme substrate SEQ ID NO: 101.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the invention
                   the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 4; Page 54; 115pp; English.
   present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABK00057 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-FEB-2001; 2001WO-US003504.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-FEB-2000; 2000US-0179983P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       937 AGAGAATTTTACGCA 951
                                                                                                                                                       937 AGAGAATTTTACGCA 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    66.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 AGAGAAUUUCAUGCA 15
                                                                                                                                                                           2 AGAGAAUUUCAUGCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RIBOZYME PHARM INC. FATTAEY A R.
                                                                                                                                                                                                                                                                        AAH94676 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 66.7
nes 10; Conservative
                                                                                                                       10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fattaey AR, Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                            Human; checkpoint kina
RNA cleavage; cancer;
   including cancer. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-496922/54.
                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200157206-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                         09-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-AUG-2001.
                                                                                                                                                                                                                                                                                                        AAH94676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABK00057
                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 714
                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABK00057,
                                                                                                                                                                                                                                                          AAH94676
                                                                                                                                                         ð
                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
   8 X G G
```

```
Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; anotropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOG0; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; human; immunodeficiency virus; HIV associated NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; mCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; central nervous system injury; central nervous cherepathathy; anditiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease; ALS; ALS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chowrira BM;
                                                                   Human NOGO Hammerhead Ribozyme #57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 88; Page 66; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-FEB-2000; 2000US-0181797P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC.
12-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BLATT L.
MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-607195/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MCSW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (BLAT/)
```

·.

```
cerebroprotective, nootropic, incurportective, antiparkinsonian, muscular, CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; incozyme; G-cleaver; amberzyme; Zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; MCL; immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CWR, Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson; disease; ataxia; Huntington's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, crentzfeldt-Jakob disease, attaxia, Huntington's disease, crentzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, central nervous system injury.
                                                                                                                                                                                        Gaps
                                                                                                                                                                                        ;
                                                                                                                                                   DB 1; Length 17;
                                                                                                                                                 Match 4.1%; Score 11.8; DB 1; Length 1 Local Similarity 86.7%; Pred. No. 6.4e+02; Los 13; Conservative 0; Mismatches 2; Indels
                                                                           sequence is a hammerhead ribozyme of the invention
                                                                                                                Sequence 17 BP; 0 A; 5 C; 2 G; 0 T; 10 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 88; Page 81; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-FEB-2001; 2001WO-US004273
                                                                                                                                                                                                                               949 GCAAGAAGAGCCAAA 963
                                                                                                                                                                                                                                                                                                                                                            ABK00952 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                16 GCAGGAAGAGCAAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                      12-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human NOGO Inozyme #222.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-607195/69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                   ABK00952;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MCSW/)
                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (RIBO-)
(BLAT/)
                                                                                                                                                                                                                                                                                                                           RESULT 715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ношо
                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                              ABK00952/
                                                                                                                                                                                                                                                                                                                                                            888888
```

```
possessing an Inozyme (an endotytic mucies acid is a cleaving RNA with a nYN motif) prossessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) prossessing an NCH motif), a G-cleaver (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a n NGN triplet), a zinzyme (cleaving RNA with a nordic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^2+.

CC CD20 in the presence of a divalent cation that is preferably Mg^2+.

CC FUELD on The treatment may further comprise the use of one or more concepts. The coll and treat a patient having a condition associated with the level of therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-tedgician's lymphoma (MCL), immunodeficiancy virus) associated NHL, lymphocytic lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, companied acid may be considered with a cell to reduce NOGO gene in the presence of a divalent cation that is preferably Mg^2+. Furthermore, the presence of a divalent cation that is preferably Mg^2+. Furthermore, the coll and treat a patient having a condition associated with the level of coll and treat a patient having a condition associated with the level of therapies. In particular, the NOGO-targetting nucleic acid may be contacted with a cell to reduce NOGO activity of the coll and treat a patient having a condition associated with the level of therapies. In particular, the NOGO-targetting nucleic acid may be contacted with a cell to reduce NOGO activity of the collementer may further comprise the use of one or more cell and treat a patient having a condition associated with the level of therapies. In particular, who may be considered with a cell to reduce NOGO activity of the componenterapy-induced neuropathy, amy or condition associated with the level of themotherapy induced neuropathy and/or other neurodegenerative disease ataxia, Huntington's disease, centralies of the present of 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; decleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphomy; leukaemia; Muman immundeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunnocytoam; IMC; immunne thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovaevcular accident; CVA; Alzheimer's disease; multiple sclerosis; chemocherapy-induced neuropathy; amycrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease; accidents Alzheimer's disease; multiple sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease; accidents and accidents and accidents and accidents accidents and accidents and accidents and accidents accidents and accidents accidents and accidents accidents and accidents accidents and accidents accidents and accidents accidents and accidents a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 0 A; 6 C; 2 G; 0 T; 9 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence is an inozyme of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   949 GCAAGAAGAGCCAAA 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABK00953 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 GCAGGAAGAGCAAAA 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human NOGO Inozyme #223.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABK00953;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABK00953/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
```

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 09-FEB-2001; 2001WO-US004273

```
06-MAR-2000; 2000US-0187128P.
   (RIBO-) RIBOZYME PHARM INC.
     BLATT L.
MCSWIGGEN J.
CHOWRIRA B M.
         (CHOM/)
     BLAT/)
        MCSW/)
```

Chowrira BM; Mcswiggen J, Blatt L,

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88; Page 81; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a D20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids an NCH motif), a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NGN motif) of CD20 in the presence of a divalent cation that is preferably MG^2+.

CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably MG^2+.

CC treat lymphoma (NED) bulky low-grade or follicular non-floadgrin's lymphoma (NED) bulky low-grade or follicular non-floadgrin's lymphoma (NED), immunocytoma (IMC), small B-cell lymphocytic lymphoma, cleave RNA, in a seciated with the level lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, cleave RNA, in a secondard or divalent cation that is preferably MG^2+. Furthermore, the creatment may further comprise the use of one or more cated and treat a patient having a condition associated with the level of the cargetting nucleic acid may be contacted with a cell to reduce NGO gene in the cated that nervous system (CNG) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (MS), chemotherapy-induced neuropathy, and/or other neurodegenerative disease starka, Huntington's disease, ceruses which respond to the modulation of NOGO expression. The present contacted the invention of NOGO expression. The present sequence is an inozyme of the invention

Sequence 17 BP; 0 A; 5 C; 3 G; 0 T; 9 U; 0 Other;

```
Gaps
                                                .;
0
    Length 17;
                                              2; Indels
Query Match
4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 6.4e+02;
Matches 13; Conservative 0; Mismatches 2;
```

ö

δ

ABK03461 standard; RNA; 17 BP. RESULT 717 ABK03461, d

12-MAR-2002 (first entry) Human CD20 Zinzyme #12. ABK03461; **EXXEXEX** 

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian;

muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme, Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease. DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; Iymphoma; leukaemia;
B-cell lymphoma; non-fodgkin's lymphoma; NHL; lymphocytic leukaemia;
human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia;
inflammatory arthropathy; central nervous system injury;
cerebrovascular accident; CVA; Alzheimer; disease; multiple sclerosis;
chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS;
parkinson; disease; ataxia; Huntington's disease; 

Homo sapiens. Synthetic. WO200159103-A2.

16-AUG-2001

09-FEB-2001; 2001WO-US004273.

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P.

06-MAR-2000; 2000US-0187128P.

RIBOZYME PHARM INC. (BLAT/) (MCSW/) (RIBO-)

BLATT L. MCSWIGGEN J. CHOWRIRA B M. (CHOM/)

Chowrira BM; Blatt L, Mcswiggen J,

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 30; Page 154; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a cD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGCO). The nucleic acids and the presence of a color acid cleaving a an RNA molecule DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYM motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NYM motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NYM motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NYM motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NGN triplet).

CC G-CD20 in the presence of a divalent cation that is preferably Mg⁻²+. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more theory of the Data of the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, llw llw, bulky low-grade or follicular non-low may number thrombocytopaenia, and inflammatory arthropathy. The NOGO-targetting nucleic acid may be contacted with a cell to reduce NOGO sense in the presence of a divalent cation that is preferably Mg⁻²+. Purthermore, the coll and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more coll and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more coll and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more coll and treat a patient having a condition associated with the level of therapies. In particular disease, demential multiple sclerosis (ALS), chemotherapy-induced neuropathy, amd/or other neuropathy and/or other neuropathy and/or other neuropathy acid to the resur sequence is a zinzyme molecule of the invention

Sequence 17 BP; 4 A; 3 C; 5 G; 0 T; 5 U; 0 Other;

```
..
0
                                                                                                                                                                                                                                                                                     Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin; s lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma;
                                                                                                                                                                                                                                                                                                                                                                             MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke, dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
                                Gaps
                                ö
 Length 17;
                             Indels
4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 6.4e+02;
vative 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 88; Page 78; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     central nervous system injury.
                                                                                                                                                                   ABK00774 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                             844 TGAAGACAGCGTCCT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RIBO-) RIBOZYME PHARM INC.
                                                                                    15 TGAAGACATCCTCT 1
                                                                                                                                                                                                                              12-MAR-2002 (first entry)
                                13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Blatt L, Mcswiggen J,
                                                                                                                                                                                                                                                         Human NOGO Inozyme #44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (BLAT/) BLATT L.
(MCSW/) MCSWIGGEN J.
(CHOW/) CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-607195/69
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                  ABK00774;
                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                        RESULT
```

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA motif) an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with an NGN triplet), a cinzyme (cleaving RNA with an NGN triplet), a cinzyme (cleaving RNA of CD20 in the presence of a divalent cation that is preferably MG^2.+ Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level

```
therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-Cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma, leukaemia, B-Cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic lymphoma (NHL), immunocytoma (IMC), small B-Cell lymphocytic lymphoma, (NHL), immunocytoma (IMC), small B-Cell lymphocytic lymphoma, immunocytoma (IMC), small B-Cell lymphocytic lymphoma, immunocytoma (IMC), small B-Cell lymphoma, content and inflammatory arthropathy. The NOGO-cargetting nucleic acid may be contacted with a cell to reduce NOGO gene in the presence of a divalent cation that is preferably MG<sup>2</sup>+. Furthermore, the contested acid may be contacted with a cell to reduce NOGO activity of the NOGO. The treatment may further comprise the use of one or more cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (MS), parkinson's disease, ataxia, Huntington's disease, Centrafeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOG0; hammerhead ribozyme; DNAzyme; inozyme; growth inhibitor gene; NOG0; hammerhead ribozyme; human; immundeficiency virus; HIV associated NHL; lymphoma; leukaemia; human immundeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cenebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemocherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; ataxia; Huntington's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.1%; Score 11.8; DB 1; Length 17; 80.0%; Pred. No. 6.4e+02; ive 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 3 A; 10 C; 1 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence is an inozyme of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              924 ACCACCACCTCCAG 938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 AUCUCCACCUCCAG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABK03671 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 80.0°
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human CD20 Amberzyme #20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLATT L.
MCSWIGGEN J.
CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABK03671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BLAT/)
(MCSW/)
(CHOW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABK03671/
              ð
```

antilipemic; ss.

WO200173002-A2 Homo sapiens.

04-OCT-2001

```
The Carlos may be enzymatic mucleic acid cleaving a mixing may be enzymatic mucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) prossessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) proceed an amberzyme (cleaving RNA with an NCH with a NYN motif) proceed an amberzyme (cleaving RNA with an NCH motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably MG'2+.

CC Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more creat lymphoma, leukamenia, B-cell Lymphoma, Include MHz), bulky low-grade or follicular NHL, lymphocytic treat lymphoma, leukamenia, bulky low-grade or follicular NHL, lymphoma, CHCL), immunocytoma (NHL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunocytoma (IMC), small B-cell lymphoma, cimmune thrombocytopaenia, and inflammatory arthropathy. The NOGO-correspecting nucleic acid may be contacted with a cell to reduce NOGO gene in the nucleic acid may be contacted with a cell to reduce NOGO activity of the collar and treat a patient having a condition associated with the level of the collar and treat a patient having a condition associated with the level of therapies. In particular, the NOGO-crargetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyor ophic lateral sclerosis (MS), chemotherapy-induced neuropathy, amyor other neurodegenerative disease acident collar dystrophy, and/or other neurodegenerative disease contacted to the neurodescent collars accident to the neurodescent collars accident to the neurodescent collars accident collars and a patient having a condition associated when the service collars and a patient 
                                                                                                                        Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                                                                                                       invention relates to a nucleic acid molecule which down regulates
                                                                                                                                                                                                                                                                                                                                                                           expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence is an amberzyme molecule of the invention
Chowrira BM;
                                                                                                                                                                                                                                                                                        Claim 30; Page 166; 200pp; English.
                                                                                                                                                                                                                        central nervous system injury.
Mcswiggen J,
                                                            WPI; 2001-607195/69
Blatt L,
```

Sequence 17 BP; 3 A; 3 C; 5 G; 0 T; 6 U; 0 Other;

```
Gaps
                              ..
4.1%; Score 11.8; DB 1; Length 17;
                            Indels
                6.4e+02;
               Pred. No. 6.4e
0; Mismatches
                                                       845 GAAGACAGCGTCCTG 859
            86.78;
                                                                                 17 GAAGACATCCTCCTG 3
             Best Local Similarity 86.7
Matches 13; Conservative
 Query Match
                                                         δ
```

. 0

· 0

ABA80288 standard; DNA; 17 BP. ABA80288; RESULT 720 ABA80288 

(first entry) 24-JAN-2002

MLH1 mutation correcting oligonucleotide SEQ ID NO: 3134.

Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTB; cystic fibrosis; cancer; Factor Vy; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOE; mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein B; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSEN1; antisense; UDP-glucuromosyltransferase; amyloid precursor protein; presenilin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;

Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOB; mismacch repair; MSH6; hyperlipideamia; applipoprotein B; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSRN1; antisense; UDP-glucuronosyltransferase; amyloid precursor protein; presentin-1;

MLH1 mutation correcting oligonucleotide SEQ ID NO: 3135.

(first entry)

24-JAN-2002

ABA80289;

ABA80289 standard; DNA; 17 BP

RESULT 721 ABA80289/c

```
The present invention provides single-stranded oligonucleotides which can oble used for the targeted alteration of genomic sequences, where the oligonucleotide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A (CDKN2A), APC, Factor VI, Factor IX, haemoglobin alpha locus apolipoprotein E (APOE), LDL receptor (LDLR), WDP-glucuronosyltransferase (UGT1), amyloid precursor protein (APC), presenilin-1 (PSENI) and presenilin-2 (PSENI) and scancer, adenosine deaminase deficiency, cystic fibrosis, haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonuclectide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; lve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 5 A; 9 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 7; Page 217; 294pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          various syndromes. The present sec
oligonucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0192179P.
2000US-0208538P.
                                                                                                                                                                                                                                                                                                                      27-MAR-2001; 2001WO-US009761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0244989P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             916 TTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCTCAACACACCA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 86.7
les 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (UYDE ) UNIV DELAWARE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gamper HB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-639230/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   modification.
                                                                                                                                                                                                                                                                                                                                                                                                                                     27-MAR-2000;
01-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                27-MAR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kmiec EB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
NAME OF COLORS O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
```

```
Arabidopsis thaliana VRNI. This protein and coding sequences of Arabidopsis thaliana VRNI. This protein is capable of altering the vernalisation responses of a plant. Also provided are a number of PCR primers used to isolate the sequences. The sequences are useful in the production of crop plants, where they are able to control the timing of Inversing, the duration of vernalisation required, the optimum temperature, or even eliminate the need for vernalisation completely. The present sequence is a PCR primer used to isolate the VRNI coding sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Detecting extracellular mutated oncogene DNA in animal without clinically
                                                                                                                                                                               Novel VRN1 polynucleotide sequence encoding a polypeptide which alters vernalization response of plant in which VRN1 nucleic acid is expressed.
                                                                                                                                                                                                                 useful for influencing and assessing vernalization phenotype of plants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mutant, K-ras, oncogene, p53, tumour suppressor, detection, blood; extracellular tumour-associated nucleic acid; plasma; serum; human; neoplastic; premalignant; proliferative disease; colorectal adenoma; cervical dysplasia; atypical squamous metaplasia; bronchial dysplasia; atypical squamous metaplasia; bronchial dysplasia; atypical hyperplasia; dysplastic nevi; Barrett's oesophagus; cancer; prostatic intraepithelial neoplasia; atypical endometrial hyperplasia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mutant p53 tumour suppressor related oligonucleotide SEQ ID NO:5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                 Claim 10; Page 75; 91pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-00456222
                                                   99GB-00022071.
                                                                                   (PLAN-) PLANT BIOSCIENCE LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-NOV-2000; 2000WO-US032587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PENN-) PENN STATE RES FOUND
                    13-SEP-2000; 2000WO-GB003525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAH43968 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841 CTCTGAAGACAGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 crcrcaacaaacgr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kopreski
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-381711/40.
                                                                                                                                                  WPI; 2001-273467/28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200142504-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-DEC-1999;
                                                   17-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gocke CD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                  ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ношо
   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention provides single-stranded oligonuclectides which can be used for the targeted alteration of genomic sequences, where the oligonuclectide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin.

CC retinoblastoma, BRCAL, BRCAZ, CFTR, cyclin-dependent kinase inhibitor 2A (CDKNZA), APC, Factor VII, Factor IX, haemoglobin alpha locus (CDKNZA), amyolid precursor protein (HDLR), mUDP-glucuronosyltransferase (GGTI), amyolid precursor protein (APC), presentian-1 (PSEMI) and presentian-2 (PSEM2). These can be used in the gene therapy of diseases such as cancer, adenosine deaminase deficiency, cystic fibrosis, alzenient's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting oligonucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic; antilipemic; ss.
                                                                                                                                                                                                                                                                                                                                                              Oligonuclectide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VRN1; vernalisation; flowering; crop; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 0 C; 9 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A thaliana VRN1 gene PCR primer V13.
                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 7; Page 217; 294pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                  27-MAR-2000; 2000US-0192179P.
01-JUN-2000; 2000US-0208538P.
30-OCT-2000; 2000US-0244989P.
                                                                                                                                                  27-MAR-2001; 2001WO-US009761
                                                                                                                                                                                  2000US-0192176P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              916 TTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF62437 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15 TTCTCAACACCACCA
                                                                                                                                                                                                                                                                                                 Gamper HB,
                                                                                                                                                                                                                                                                  (UYDE ) UNIV DELAWARE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Arabidopsis thaliana
                                                                                                                                                                                                                                                                                                                                 WPI; 2001-639230/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200121822-A1
                                                                                     WO200173002-A2
                                                                                                                                                                                    27-MAR-2000;
                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAR-2001
                                                                                                                   04-OCT-2001
                                                                                                                                                                                                                                                                                                   Kmiec EB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAF62437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT
     ਨੋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
```

ö

Gaps

;

Indels

-diagnosed cancer, involves preparing and enriching mutated oncogene DNA, amplifying enriched DNA and detecting the product of amplified DNA.

Disclosure; Page 22; 53pp; English.

mutated oncogene DNA (I) in blood (B) from a human or animal without clinically-diagnosed cancer, which involves preparing (I) or its fragment from (B), enriching (I) by concentrating and/or isolating (I) from the cremaining extract, amplifying enriched (I) or a signal from enriched (I), or described are: (I) determining (D2) the presence of non-hammopoletic cells or tissue having a mutated oncogene allele in a human without clinically-diagnosed cancer; and (2) determining (D3) an acquired clinically-diagnosed cancer. D1 is useful for quantitatively and clinically-diagnosed cancer. D1 is useful for quantitatively and clinically-diagnosed cancer. D1 is useful for quantitatively and clinically-diagnosed cancer D1 is useful for quantitatively and cancer. D1 is useful for quantitatively and cancer. D1 is useful for quantitatively detecting extracellular mutated oncogene DNA in blood from the presence of non-hammopoietic cells or tissues having a contact of non-hammopoietic cells or tissues having a mutated oncogene allele in a human without clinically diagnosing cancer. CC D1 is useful for determining an acquired predictive risk factor for a non-hammopoietic cells or tissues having a contact of non-hammopoietic cells or tissues having a contact of the pre-mallignant conditions, and in particular to conditions inclinically diagnosed cancer. The assessment of pre-mallignant conditions, and in particular to conditions The present invention describes a method for detecting (D1) extracellular mutated oncogene DNA (1) in blood (B) from a human or animal without including colorectal adenoma, cervical dysplasia, atypical squamous metaplasia of the lung, bronchial dysplasia, atypical hyperplasia of the breast, prostatic intraepithelial neoplasia, atypical endometrial hyperplasia, dysplastic nevi of the skin or Barrett's oesophagus. The present sequence represents a mutant p53 oligonucleotide related to a mutant involving codon 175 which is the most common mutation in ollorectal carcinoma, given in the exemplification of the present

Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;

. 0 Length 17; 2; Indels DB 1; Score 11.8; DB 1; Pred. No. 6.4e+02; 0; Mismatches 2 Query Match 4.1%; Scc Best Local Similarity 86.7%; Pro

796 CCAAGAGCTCTCCTC 810 ccarcacrerecte 15 ò g

AAF83176 standard; DNA; 17 BP AAF83176; **AAF**83176

(first entry) 09~JUL-2001

Probe PN(n-1)A used in detection by allele specific extension.

Synthetic.

WO200127327-A2.

19-APR-2001.

06-OCT-2000; 2000WO-US027872.

99US-0158315P 08-OCT-1999;

(PROT-) PROTOGENE LAB INC.

Brennan TM, Chatelain F, Berninger M;

Immobilisation; chemical; biological; polynucleotide amplification; nucleic acid detection; probe; hybridisation; PCR primer; ss.

WPI; 2001-290733/30.

Apparatus and method for performing a large number of chemical and biological reactions by bringing two arrays into close apposition and allowing reactants on the surfaces of the two arrays to come into

Example 11; Fig 18B; 112pp; English.

contact

The invention provides a novel system for performing reactions, that comprises a first solid support with a reactant of each reaction immobilized on to it, and a second solid support either providing a second reactant confined to a specific area on the surface, or a chemical /mechanical separation of the reactions, where the first and second solid supports are assembled to provide an environment for performing the reactions in parallel. The methods and apparatus are useful for performing a large number of chemical and biological reactions, especially polynucleotide amplification reactions and the detection of sequence variations, expression levels and their functions. The method is capable of generating large amounts of data or products per unit time by carrying out large numbers of reactions in parallel. The process is also amenable to full automation. Sequences AAF83164-179 represent probes used in detecting amplified products by allele specific extension, the products amplified by performing large numbers of PCR reactions using array-immobilised and releasable primers

Sequence 17 BP; 6 A; 8 C; 3 G; 0 T; 0 U; 0 Other;

Gaps . 0 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ive 0; Mismatches 2; Indels Local Similarity 86.7 nes 13; Conservative Query Match Best Loca Matches

0

셤

ò

ABK28888/c

ö

Gaps

ABK28888 standard; DNA; 17 BP. (first entry) 09-APR-2002 ABK28888; 

HPV blocker probe SH-3.

HSV-1; HSV-2; HPV; HBV; ss; probe; microorganism classification; infectious disease; genetic abnormality; cancer; capture sequence; HSV-1; HSV-2; HPV; HBV; ss; blocker probe.

Human papillomavirus.

WO200196608-A1.

20-DEC-2001

15-JUN-2001; 2001WO-US019353

15-JUN-2000; 2000US-00594839 (DIGE-) DIGENE CORP.

Tang Troy J, Williams I, Lorincz A, Anthony J,

WPI; 2002-130748/17.

diagnosing infections or detecting genetic abnormalities, comprises producing and detecting double-stranded hybrids between probes and the Detecting a target nucleic acid, for identifying microorganisms target nucleic acid.

Claim 53; Page 25; 128pp; English.

The invention relates to detecting a target nucleic acid comprising (a)

```
thy bridising a single-stranded or partially single-stranded target nucleic acid to a capture sequence probe and a signal sequence probe to form double-stranded hybrids between the probes and the target nucleic acid, where the capture sequence probe and the signal sequence probe acid, where the capture sequence probe and the signal sequence probe acid, concleic acid and not hybridising to each other. (b) adding a blocker probe to the hybridisation reaction, where the blocker probe hybridises to excess non-hybridised capture sequence probes, (c) binding the hybrid to a solid phase to form a bound hybrid, and (d) detecting the bound chybrid. The method is used to detecting a target nucleic acid. The method is used to detecting a target nucleic acid. The method is used to detecting a target nucleic abnormalities, infectious diseases, add measuring response to various types of treatment. The method is also useful for detecting the presence of concleic acid in test samples. The method is not only rapid and sensitive, but is also highly specific and capable of discriminating highly concleotides complementary to the capture sequence probes are used in the method collamonal signal in detection and increasing specificity of the assay.

Che method is good to eliminate excess apture sequence probe, thus reducing the background signal in detection and increasing specificity of the assay.

The present sequence is a blocker probe derived from HSV-1, HSV-2, HPV or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; mouse; rat; TEM; tumour endothelial marker; NEM; PEM; cytostatic; normal endothelial marker; immunostimulant; antiangiogenic; tumour; necangiogenesis; vascularised tumour; polycystic kidney disease; diabetee; retinopathy; rheumatoid arthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               specifically binds to an extracellular domain of a tumor endothelial marker (TEM) protein, useful for inhibiting tumor growth.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          An isolated molecule comprising an antibody variable region which
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Long human Tumour Endothelial Marker SEQ ID NO 324.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 5 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kinzler KW, Vogelstein B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-AUG-2000; 2000US-0225599P.
11-AUG-2000; 2000US-0224360P.
11-APR-2001; 2001US-0282850P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           800 GAGCTCTCCTCCAAC 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-AUG-2001; 2001WO-US024031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABL92158 standard; cDNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17 GAGGICTICICCAAC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNINGOH SUHOL VINU ( OLYU)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-291856/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200210217-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                            HBV sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    psoriasis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                St Croix B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABL92158;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   datches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

. 0

Gaps

0

```
·;
                         The invention relates to an isolated molecule comprising an antibody variable region which specifically binds to an extracellular domain of a tumour endothelial marker (TEM) protein selected from ABB90732, ABB90740, ABB90749, ABB90770 and ABB90769. The antibodies which bind to TEM proteins have cytostatic, immunostimulant and antiangiogenic activity. They are useful for inhibiting tumour growth, neoangiogenesis in subjects bearing a vascularised tumour, polyoystic kidney disease, diabetic retinopathy, rheumatoid arthritis and psoriasis. Human, mouse and rat TEM genes and the encoded proteins (ABB92075-ABH92141 and ABB90712-ABB90789) are disclosed, as are marker oligonucleotide sequences: tumour endothelial markers (TEM) ABL92041 and ABL92143-ABL92191; normal endothelial markers (MEM) ABL92044, and pan-endothelial markers oligonucleotide sequence is that of an oligonucleotide marker useful to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6514.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shannon ME;
                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                              4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chen W,
                                                                                                                                                                                                                                                                             Seguence 17 BP; 5 A; 4 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rank DR,
                                                                                                                                                                                                                                                                                                                                              0; Mismatches
Disclosure; Page 20; 331pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABN06522 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0236359P.
2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000661.
2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                               706 AGCGAGTCCCAGGAG 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001; 2001WO-US000665
30-JAN-2001; 2001WO-US000666
30-JAN-2001; 2001WO-US000667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001US-0266860P
                                                                                                                                                                                                                                                                                                                                                                                                            2 AGTGAGACCCAGGAG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                              13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABN06522;
                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 72
ABN06522
à
```

Shannon ME;

Chen W,

```
Sequence 17 BP; 4 A; 10 C; 1 G; 2 T; 0 U; 0 Other;
                 Disclosure; SEQ ID NO 6514; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000666.
                                                                                                                                                                                                                                                                                ABN00715 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                        25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                     2000US-0207456P
                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                         2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000661.
2001WO-US000662.
                                                                                                                                                                                                                                 918 ATCATCACCACC 932
                                                                                                                                                                                                                                             ATCTCCACCACCACC 15
                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                              WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                         04-OCT-2000; 2
30-JAN-2001; 2
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                            21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                           29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                           06-DEC-2001.
                                                                                                                                                                                                                                                                                              ABN00715;
                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                   RESULT 728
                                                                                                                                                                                                                                                                          ABN00715
                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                               g
```

0

Gaps

·,

Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.

26-MAY-2000; 2000US-0207456P. 25-MAY-2001; 2001WO-US016981

WO200192524-A2. Homo sapiens.

06-DEC-2001

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify concleic acids in samples, as amplification substrates, to nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as specifically and/or amount specifically of hGDMLP-proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The concentration and skeletal muscle disorders. hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart can skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence data for this patent did not form pat of the printed specification, but was obtained in electronic format directly from WIPO concert figures as production of the present did not form pat of the present and patent of patented by sequence of the sequence of th
                                                                                                                                                                                                                                                                                                                                               New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8907.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 86.7%; Pred. No. 6.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 3 A; 10 C; 2 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Disclosure; SEQ ID NO 707; 214pp; English.
                                                                                                                                                                                                                Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABN08915 standard; DNA; 17 BP.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
05-FEB-2001; 2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          797 CAAGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 CAAGACCTCTCCCCC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-MAY-2002 (first entry)
                                                                                                                                                                                                                Penn SG,
                                                                                                                                                                                                                                                                                       WPI; 2002-179446/23.
                                                                                                                                             (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                    Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABN08915;
                                                                                                                                                                                                                    Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABN08915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                    The present invention describes a human genome-derived myosin-like

protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-

c protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-

c can be used as probes to detect, characterise and quantify

mucleic acids can be used as probes to detect, characterise and quantify

c hGDMLP-1 nucleic acids in samples, as amplification substrates, to

provide initial substrates for the recombinant engineering of hGDMLP-1

protein variants having desired phenotypic improvements, and for

expressing the proteins. The hGDMLP-1 proteins or polypeptides may be

c expressing the proteins. The hGDMLP-1 proteins or polypeptides may be

cused as immunogens to raise antibodies that specifically recognise hGDMLP-

c used as immunogens to raise antibodies that specifically recognise hGDMLP-

c and/or amount specifically of hGDMLP-proteins, as specific biomolecule

and/or amount specifically of hGDMLP-proteins, as specific biomolecule

capture probes for surface-enhanced laser desorption ionisation, as

therapeutic supplement in patients having specific deficiency in hGDMLP-1

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

colynucleotide sequence represents an oligomer used in the screening of the

CC The present sequence in this patent did not form part of the printed

c and skeletal muscle disorders. hGDMLP-1 may be used for diagnosing a

CC The sequence data for this patent did not form part of the printed

c and fup. who int / pub/published_pot_sequence

cc at ftp.wipo.int/pub/published_pot_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
       or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:707.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
4.1%; Score 11.8; DB 1; Length 17;
Best Local Similarity 86.7%; Pred. No. 6.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
```

```
The present invention describes a human genome-derived myosin-like protein 1 (hGPMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 proteins or polypeptides may be expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as specifically recognise hGDMLP-1 proteins, as specific biomolecule and/or amount specifically proteins, as specific biomolecule and/or amount specifically proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the exemple of hGDMLP-1 is localised to chromosome 22. The present sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                      Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 7 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                      Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Disclosure, SEQ ID NO 8907; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                      Hanzel DK,
                                                           30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABN06106 standard; DNA; 17 BP.
                                                                                                                                                                                                                       30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2011WO-US000659.
30-JAN-2001; 2001WO-US000670.
65-FEB-2001; 2001US-0266860P.
                     2000US-0236359P
2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 708 CGAGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 CGAGICCCAGCAGCG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 86.7
nes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                    Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                         (AEOM-) AEOMICA INC
                                     04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABN06106;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                    Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 730
ABN06106
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      q
```

Shannon ME;

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as the repeated entry and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production and in vaccines of the hGDMLP-1 is localised for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and should be accounted by the production and in vaccines or for replacement therapy. The construction and in vaccines of the hGDMLP-1 is localised to chromosome 22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention, N.B. The sequence data for this patent did not form part of the printed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chen W,
skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 11.8; DB 1;
Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.1%; Scor. No. e...
86.7%; Pred. No. e...
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; SEQ ID NO 6098; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanzel DK,
                                                                                                                                                                                                                2000US-0234687P
2000US-0236359P
                                                                                                                                                                                                                                                  2000GB-00024263
                                                                                                                                                                                                                                                                                                          2001WO-US000663
2001WO-US000664
                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000668
                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001; 2001WO-US000670
05-FEB-2001; 2001US-0266860P
                                                                                                                                                    25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                    2001WO-US000661
                                                                                                                                                                                                                                                                                          2001WO-US000662
                                                                                                                                                                                                                                                                                                                                                2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000666
                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
                                                                            WO200192524-A2
                                          Homo sapiens.
                                                                                                                                                                                                              21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                            30-JAN-2001;
                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
                                                                                                                                                                                            26-MAY-2000;
                                                                                                                                                                                                                                                    04-OCT-2000;
                                                                                                                                                                                                                                                                      30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001;
                                                                                                                  06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
```

ö

ਨੇ

ö

Gaps

.. 0

RESULT 731

```
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                 Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7662.
                                                                                                                                                                                                                                                                                                                                                                           Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                           Chen W,
                                                                                                                                                                                                                                                                                                                                                                           Hanzel DK, Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; SEQ ID NO 7662; 214pp; English.
         ABN07670 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                              30-JAN-2001; 2001WO-US000665.
                                                                                                                                                                                                                                                   30-JAN-2001; 2001WO-US000662.
                                                                                                                                                                                 25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                              2000US-0234687P.
                                                                                                                                                                                                                        2000US-0236359P.
                                                                                                                                                                                                                                2000GB-00024263.
2001WO-US000661.
                                                                                                                                                                                                                                                                      2001WO-US000664.
                                                                                                                                                                                                                                                                                                 30-JAN-2001; 2001WO-US000667.
                                                                                                                                                                                                                                                                                                                     2001WO-US000669
                                                                                                                                                                                                                                                                                                                             2001WO-US000670
                                                                                                                                                                                                                                                                                                                                       05-FEB-2001; 2001US-0266860P
                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                             Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                         (AEOM-) AEOMICA INC.
                                                                                                                                            WO200192524-A2.
                                                                                                                                                                                                                                                                      30-JAN-2001;
                                                                                                                                                                                                                                                                                                                     30-JAN-2001;
                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                04-OCT-2000;
                                               29-MAY-2002
                                                                                                                                                                                                                        27-SEP-2000;
                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                              21-SEP-2000;
                                                                                                                                                              06-DEC-2001.
                            ABN07670;
                                                                                                                                                                                                                                                                                                                                                                             Gu Y,
ABN07670/c
```

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 mucleic acids can be used as probes to detect, characterise and quantify cacles initial substrates for the recombinant engineering of hGDMLP-1 provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins as standards in assays used to determine the concentration and/or amount specifically of hGDMLP-proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionization, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The concentration and skeletal muscle disorders, hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders, hGDMLP-1 is localised to chromosome 22.

The present sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form pat of the printed specification, but was obtained in electronic format directly from MIPO at figure properties of the present directly from MIPO at figure properties of the present directly from MIPO at figure production.

Sequence 17 BP; 6 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

ö Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss. Gaps Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6512. ; Length 17; Indels 4.1%; Score 11.8; DB 1; 86.7%; Pred. No. 6.4e+02; iive 0; Mismatches 2; ABN06520 standard; DNA; 17 BP. 30-JAN-2001; 2001WO-US000668. 30-JAN-2001; 2001WO-US000669. 30-JAN-2001; 2001WO-US000670. 30-JAN-2001; 2001WO-US000664. 2001WO-US000666. 2001WO-US000667. 2000US-0207456P. 2000US-0236359P 2000GB-00024263 2001WO-US000661 2001WO-US000663 2001US-0266860P 25-MAY-2001; 2001WO-US016981 2001WO-US000662 822 17 Crccagcrcarggrr 3 (first entry) Query Match
Best Local Similarity 86.7
Matches 13; Conservative 808 CTCCAACTCAGGGTT (AEOM-) AEOMICA INC. WO200192524-A2. 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 05-FEB-2001; 30-JAN-2001; Homo sapiens. 26-MAY-2000; 04-OCT-2000; 21-SEP-2000; 27-SEP-2000; 06-DEC-2001. 29-MAY-2002 ABN06520; RESULT 732 ABN06520 à q

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify browlde initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP as specifically of hGDMLP as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1

New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.

Disclosure; SEQ ID NO 6512; 214pp; English.

Shannon ME;

Chen W,

Rank DR,

Hanzel DK,

Gu Y, Ji Y, Penn SG,

WPI; 2002-179446/23.

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:706.
                                                                                                                                                                                                                            .
0
                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chen W,
                                                                                                                                                           Sequence 17 BP; 5 A; 9 C; 1 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-OCT-2000; 2000GB-00024263.
30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US0006665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hanzel
                                                                                                                                                                                                                                                                                                                                                               ABN00714 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000US-0234687P.
2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001; 2001WO-US000670
05-FEB-2001; 2001US-0266860P
                                                                                                                                                                                                                                                       918 ATCATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                  3 Arcredecaccace 17
                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                        Local Similarity 86.7
nes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                              ABN00714;
                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gu Y,
                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                 RESULT 733
                                                                                                                                                                                                                                                                                                                                                 ABN00714
                                                                                                                                                                                                                                                                                                                                                              à
```

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-

Disclosure; SEQ ID NO 706; 214pp; English.

```
nucleic acids can be used as probes to detect, characterise and quantify
chorder inteled acids in samples, as amplification substrates, to
provide initial substrates for the recombinant engineering of hGDMLP-1
c provide initial substrates for the recombinant engineering of hGDMLP-1
c protein variants having desired phenotypic improvements, and for
expressing the proteins. The hGDMLP-1 proteins or polypeptides may be
cused as immunogens to raise antibodies that specifically recognise hGDMLP
c used as immunogens to raise antibodies that specifically recognise hGDMLP
c used as immunogens to raise antibodies that specific ally recognise hGDMLP
c used as immunogens to raise artiface-hhanced laser desorption ionisation, as
c and/or amount specifically of hGDMLP proteins, as specific biomolecule
c apture probes for surface-enhanced laser desorption ionisation, as
c therapeutic supplement in patients having specific deficiency in hGDMLP-1
c production, and in vaccines or for replacement therapy. The
c production, and in vaccines or for replacement therapy. The
c production, and in vaccines or for replacement therapy. The
c production, and in vaccines or for replacement therapy. The
c production, and in vaccines and having specific deficiency in hGDMLP-1
c production, and in vaccines. HGDMLP-1 may be used for diagnosing a
disorder associated with the expression of hGDMLP-1, in particular heart
c and skeletal muscle disorders. HGDMLP-1 is localised to chromosome 22.
The present sequence in the exemplification of the present invention. N.B.
The sequence data for this patent did not form part of the printed
c specification, but was obtained in electronic format directly from WIPO
c at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:7663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 3 A; 9 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001WO-US000661.
2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0234687P,
2000US-0236359P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 797 CAAGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-FEB-2001; 2001US-0266860P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAGACCICICCCCC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABN07671 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 86.7;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ٣
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABN07671;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABN07671/c
          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
```

Shannon ME;

Chen W,

Rank DR,

Hanzel DK,

2001WO-US000666. 2001WO-US000667. 2001WO-US000668.

```
Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6103.
                                                                                                                                                                                                                                                                                                           All Match 4.1%; Score 11.8; DB 1; Length 17; Local Similarity 86.7%; Pred. No. 6.4e+02; nes 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                              ABN06111 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000US-0234687P.
2000US-0236359P.
2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0207456P
                                                                                                                                                                                                                                                                                                                                                808 CICCAACICAGGGIT 822
                                                                                                                                                                                                                                                                                                                                                                 16 crccagcrcardgrr 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
        WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                ABN06111;
                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                             RESULT 735
                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                        ABN0611
à
                                                                                                                                                                                                                                                                                                                                                                 Q
```

```
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                              30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
05-FEB-2001; 2001US-0266860P.
                                                                                 Gu Y, Ji Y, Penn SG,
                                                                                                  WPI; 2002-179446/23.
                                                                 (AEOM-) AEOMICA INC.
      30-JAN-2001;
30-JAN-2001;
                      30-JAN-2001;
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                       Sequence 17 BP; 7 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
                                                           Disclosure; SEQ ID NO 7663; 214pp; English.
```

```
The present invention describes a human genome-derived myosin-like

C c can be used in gene therapy and vaccine production. The HGDMLP-1

C c can be used in gene therapy and vaccine production. The HGDMLP-1

mucleic acids can be used as probes to detect, characterises and quantify

mucleic acids can be used as probes to detect, characterises and quantify

CC hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1

provide initial substrates for the recombinant engineering of hGDMLP-1

protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be

CC expressing the proteins. The hGDMLP-1 proteins or polypeptides may be

capture probes for surface-enhanced laser describion in onfaction.

and/or amount specifically of hGDMLP-1 proteins, as specific biomolecule

capture probes for surface-enhanced laser description indisation, as

therapeutic supplement in patients having specific deficiency in hGDMLP-1

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

production associated with the expression of hGDMLP-1, in particular heart

and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence in the exemplification of the present invention. N.B.

CC The present sequence in the exemplification of the present invention.

CC Specification, but was obtained in electronic form at directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.1%; Score 11.8; DB 1; Length 17;
86.7%; Pred. No. 6.4e+02;
live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 2 A; 7 C; 5 G; 3 T; 0 U; 0 Other;
Disclosure; SEQ ID NO 6103; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781 GCAGCCCCTCTGGTG 795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 gcagcccrccagre 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 86.7
hes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   à
```

ö

Gaps

. 0

Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.

WO200192524-A2 Homo sapiens.

06-DEC-2001

Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6095.

(first entry)

29-MAY-2002

ABN06103;

BP.

ABN06103 standard; DNA; 17

RESULT 736

ABN06103

```
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser
                                                                                                                                                                                                                                     or as specific biomolecule capture probes for surface-enhanced lased desorption ionization, comprises human myosin-like protein hGDMLP-1
                                                                                                                                                                                                                                                                 Disclosure; SEQ ID NO 6095; 214pp; English.
                                                                                                                                                                                           Hanzel DK,
                                                             2001WO-US000661.
2001WO-US000662.
                                                                               2001WO-US000663.
2001WO-US000664.
                                                                                                 30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
                                                                                                                           2001WO-US000668.
2001WO-US000669.
                                                   2000GB-00024263
        25-MAY-2001; 2001WO-US016981
                         2000US-0207456P
                                            2000US-0236359P
                                                                                                                                              2001WO-US000670
                                                                                                                                                       2001US-0266860P
                                                                                                                                                                                          Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                            WPI; 2002-179446/23.
                                                                                                                                                                         (AEOM-) AEOMICA INC.
                                  21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                        30-JAN-2001;
                                                                                                                           30-JAN-2001;
                                                                                                                                    30-JAN-2001;
                                                                                                                                                      05-FEB-2001;
                          26-MAY-2000;
```

Shannon ME;

Chen W,

Rank DR,

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, or provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The production and in vaccines of for replacement therapy. The concentration and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hobMLP-1 sequence this patient did not form part of the pripted content of the pripted conten specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence

```
Gaps
                                                                       ö
                                 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; lve 0; Mismatches 2; Indels
Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                      775 CTGAGGCCAGCCCCT 789
                                                   86.7%;
                                                                     13; Conservative
                                                   Local Similarity
                                    Query Match
                                                                     Matches
                                                                                                        ð
```

0

CTGTGAGCAGCCCCT 17 ABN06521 standard; DNA; 17 m RESULT 737 ABNO6521 ID ABNO XX AC ABNO XX DT 29-M g

(first entry) 29-MAY-2002

ABN06521;

Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss. Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6513. 2000US-0234687P 2000US-0236359P 2001WO-US000663 2001WO-US000664 2001WO-US000666 2001WO-US000669 2001WO-US000670 25-MAY-2001; 2001WO-US016981 2000GB-00024263 2001WO-US000661 2001WO-US000662 2001WO-US000665 2001WO-US000667 2001WO-US000668 2001US-0266860P (AEOM-) AEOMICA INC. WO200192524-A2. Homo sapiens. 04-OCT-2000; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 05-FEB-2001; 21-SEP-2000; 27-SEP-2000; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 26-MAY-2000; 30-JAN-2001; 06-DEC-2001 

New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1. WPI; 2002-179446/23.

Shannon ME;

Chen W,

Hanzel DK, Rank DR,

Gu Y, Ji Y, Penn SG,

Disclosure; SEQ ID NO 6513; 214pp; English.

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polymuclectide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 mucleic acids can be used as probes to detect, characterise and quantify mucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 mucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for cypresting the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser describion ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The production and in waccines or for replacement therapy. The production and in waccines or for replacement therapy. The polymucleotide sequences encoding hGDMLP-1 who he was and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this parent did not form part of the printed specification, but was obtained in electronic format directly from WIPO ftp.wipo.int/pub/published_pct_sequence

Sequence 17 BP; 5 A; 9 C; 1 G; 2 T; 0 U; 0 Other;

Gaps . 0 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; tive 0; Mismatches 2; Indels 13; Conservative Local Similarity Query Match Best Loca Matches

. 0

918 ATCATCACCACC 932

ò

specification, but was obtained in electronic format directly from WIPO

```
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                              Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Shannon ME;
                                                                                                                                                                                                                                        Human GDMLP-1 17-mer scanning SEQ ID NO:4 sequence SEQ ID NO:708.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000661.

2001WO-US000663.

2001WO-US000664.

2001WO-US000664.
                                                                                                          ABN00716 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0207456P
2 ATCTCCACCACCACC 16
                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-FEB-2001;
                                                                                                                                                                                               29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-DEC-2001.
                                                                                                                                                   ABN00716;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gu Y,
                                                               RESULT 738
                                                                                      ABN00716
```

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 con be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser describing in instance in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines of for replacement therapy. The prosent sequence represents an oligomer tased for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence data for this patent did not form part of the printed Disclosure; SEQ ID NO 708; 214pp; English.

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                      Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shannon ME;
                                                                                                                                                                                                                                                                                                                                          Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6102.
                                                                                                       0;
                                                                         Length 17;
                                                                                                         2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen W,
                                          Sequence 17 BP; 3 A; 10 C; 2 G; 2 T; 0 U; 0 Other;
                                                                         4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 6.4e+02;
iive 0; Mismatches 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; SEQ ID NO 6102; 214pp; English.
           at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000665.
2001WO-US000666.
2001WO-US000667.
                                                                                                                                                                                                                                                   ABN06110 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000663.
2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
05-FEB-2001; 2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0234687P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001WO-US000662
                                                                                                                                      797 CAAGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000661
                                                                                                                                                                     1 CAAGACCTCTCCCCC 15
                                                                                                                                                                                                                                                                                                               (first entry)
                                                                         Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                               29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-DEC-2001.
                                                                                                                                                                                                                                                                                  ABN06110;
                                                                                                                                                                                                                                       ABN06110
                                                                                                                                                                                                                                                                 8 X G G
                                                                                                                                          ò
                                                                                                                                                                    g
```

Disclosure; SEQ ID NO 8906; 214pp; English.

and/or amount specifically of HGDMLP proteins, as specific blomolecule capture probes for surface-enhanced laser description ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the DMGMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/published_pct_sequence proteins, as standards in assays used to determine the concentration

Sequence 17 BP; 3 A; 7 C; 4 G; 3 T; 0 U; 0 Other;

```
Score 11.8; DB 1; Length 17;
Pred. No. 6.4e+02;
0; Mismatches 2; Indels
       4.1%;
                                                   781 GCAGCCCCTCTGGTG 795
                                                                       GCAGCCCTCCAGTG 16
Query Match
Best Local Similarity 86.7%
                                                                      0
                                                   à
                                                                      g
```

.; 0

Gaps

0,

ABN08914 standard; DNA; 17 (first entry) 29-MAY-2002 ABN08914; RESULT 740 ABNOB914

LID ABNO
XX
AC ABNC
XX
DE Huma
XX
KW MUSC
KW

BP.

Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss. Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8906.

Homo sapiens

WO200192524-A2.

06-DEC-2001.

25-MAY-2001; 2001WO-US016981 26-MAY-2000; 2000US-0207456P 21-SEP-2000; 2000US-0234687P

30-JAN-2001; 2001WO-US000662. 30-JAN-2001; 2001WO-US000663. 30-JAN-2001; 2001WO-US000664. 30-JAN-2001; 2001WO-US000665. 27-SEP-2000; 2000US-0236359P. 04-OCT-2000; 2000GB-00024263. 30-JAN-2001; 2001WO-US000661.

30-JAN-2001; 2001WO-US000666. 30-JAN-2001; 2001WO-US000668. 30-JAN-2001; 2001WO-US000669. 30-JAN-2001; 2001WO-US000670.

(AEOM-) AEOMICA INC

05-FEB-2001; 2001US-0266860P

Gu Y, Ji Y, Penn SG,

New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1. WPI; 2002-179446/23.

Shannon ME;

Chen W,

Hanzel DK, Rank DR,

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynuclectide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 can be used as probes to detect, characterise and quantify hGDMLP-1 mucleic acids in samples, as amplification substrates, to hGDMLP-1 provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or ammont specifically of hGDMLP proteins, as specific bicmolecule capture probes for surface-enhanced laser describin in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The disorder associated with the expression of hGDMLP-1, in particular heart can and sheltal muscle disorders. hGDMLP-1 is localised to chromosome 22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·;
                                                                                                                                                                                                                                                                                                                                                     The present sequence represents an oligomer used in the screening of the MDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; KTOMla; KTOMl; kidney tumour overexpressed membrane; cytostatic; gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung; kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human KTOM1a portion (ABQ63232) probe # 724.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                               at ftp.wipo.int/pub/published pct sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000665.
2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000669.
2001WO-US000670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001US-00864761.
2001US-0315676P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               708 CGAGTCCCAGGAGAG 722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-SEP-2001; 2001WO-US029656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001WO-US000667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 ccacrcccaccacc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABQ64011 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200224750-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABQ64011;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABQ6401
q
```

28-AUG-2001; 2001US-0315676P.

```
;
0
                                                                                                                                                                                                                                                         KTOMI (kidney tumour overexpressed membrane) protein. The protein of the invention has cytostatic activity. The nucleotide may have a use in gene therapy. The KTOMI nucleic acids may be used to diagnose, treat or monitor a disease caused by altered expression of human KTOMI.

Compositions comprising the nucleic acids, proteins or antibodies may be used to treat subjects having defects in KTOMI which can manifest as cancer of the kidney, as well as a disorder of liver, bone marrow, brain, heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta function. The sequence represents a probe used in the invention to scan the nt 1-1001 portion of human KTOMIa (ABQ63232)
                                                                                                                        New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic
                                                                                                                                      acids encoding the protein, useful for treating subjects having defects in KTOMI which can manifest as cancer of the kidney, or as a disorder of e.g., liver or bone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, KTOMla; KTOMl; kidney tumour overexpressed membrane; cytostatic; gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung; kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
                                                                                                                                                                                                                                              The invention relates to a novel isolated nucleic acid encoding human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       / Match 4.1%; Score 11.8; DB 1; Length 17; Local Similarity 86.7%; Pred. No. 6.4e+02; nes 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 4 A; 3 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human KTOM1a portion (ABQ63232) probe # 726.
                                                                                                                                                                                                           Example 2; Page 252; 418pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABQ64013 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0234687P.
2000US-0236359P.
2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001; 2001WO-US000661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US000667,
2001WO-US000668,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
23-MAY-2001; 2001US-00864761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            787 CCTCTGGTGCCAAGA 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-SEP-2001; 2001WO-US029656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATTIGGIGCCAAGA 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                   WPI; 2002-479509/51
                  (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200224750-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      20-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABQ64013;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                  Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABQ64013
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic acids encoding the protein, useful for treating subjects having defects in KTOM1 which can manifest as cancer of the kidney, or as a disorder of e.g., liver or bone.
                                                                                                                                                                                                                                                          KTOMI (kidney tumour overexpressed membrane) protein. The protein of the invention has cytostatic activity. The nucleotide may have a use in gene therapy. The KTOMI nucleic acids may be used to diagnose, treat or monitor a disease caused by altered expression of human KTOMI.

Compositions comprising the nucleic acids, proteins or antibodies may be used to treat subjects having defects in KTOMI which can manifest as cancer of the kidney, as well as a disorder of liver, bone marrow, brain, heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta function. The sequence represents a probe used in the invention to scan the nt 1-1001 portion of human KTOMIa (ABQ63232)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human, KTOMla; KTOMl; kidney tumour overexpressed membrane; cytostatic; gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung; kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
                                                                                                                                                                                                                                             The invention relates to a novel isolated nucleic acid encoding human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.1%; Score 11.8; DB 1; Length 17;
86.7%; Pred. No. 6.4e+02;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 5 A; 3 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human KTOM1a portion (ABQ63232) probe # 725.
                                                                                                                                                                                                              Example 2; Page 252; 418pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000664.
2001WO-US000665.
2001WO-US000666.
2001WO-US000667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABQ64012 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0236359P.
2000GB-00024263.
2001WO-US000661.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               787 CCTCTGGTGCCAAGA 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-SEP-2001; 2001WO-US029656.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 CATTTGGTGCCAAGA 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 13; Conservative
                                                                                            WPI; 2002-479509/51.
                              (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200224750-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABQ64012;
                                                                 Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABQ64012
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
```

0;

```
New human kidney tumor overexpressed membrane (KTOMI) protein and nucleic acids encoding the protein, useful for treating subjects having defects in KTOMI which can manifest as cancer of the kidney, or as a disorder of
                                                                                                                                                                                                                                                                        The invention relates to a novel isolated nucleic acid encoding human KTCM1 (Kidney tumour overexpressed membrane) protein. The protein of the invention has cytostatic activity. The nucleotide may have a use in gene therapy. The KTCM1 nucleic acids may be used to diagnose, treat or monitor a disease caused by altered expression of human KTCM1. Compositions comprising the nucleic acids, proteins or antibodies may be used to treat subjects having defects in KTCM1 which can manifest as cancer of the kidney, as well as a disorder of liver, bone marrow, brain, heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta function. The sequence represents a probe used in the invention to scan the nt 1-1001 portion of human KTCM1a (ABQ63232)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a trypsinogen, which is a protease (I) isolated from Engraulis japonicus (Also called Engraulis japonicus or Japanese anchovy). The present invention also describes: (1) a DNA encoding (I), or encoding a protease consisting of an amino acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Protease; trypsinogen; sardine; Japanese anchovy; fish sauce; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; cive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 5 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Trypsinogen related nucleotide sequence #2.
                                                                                                                                                                                                                                           Example 2; Page 252; 418pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example; Fig 10c; 32pp; Japanese.
23-MAY-2001; 2001US-00864761.
28-AUG-2001; 2001US-0315676P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-MAR-2000; 2000JP-00084302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-MAR-2000; 2000JP-00084302.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           787 CCTCTGGTGCCAAGA 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATTIGGIGCCAAGA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABA04359 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (NISB ) JAPAN TOBACCO
                                                                                                                                                                                                           e.g., liver or bone.
                                                                                                                      WPI; 2002-479509/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-078276/11.
                                                  (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A new DNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JP2001269173-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABA04359;
                                                                                    Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

Gaps

٠;

in which part of the amino acid residue is replaced, inserted or deleted in the amino acid sequence encoded by the above DNA and having a bioactivity substantially same as (I); (2) an expression vector in which the above DNA is recombined; (3) producing a sardine-derived protease in which a host cell transformed by the above expression vector is cultured to a case where the above expression vector is cultured and (I) is recovered; (4) a protease containing substantially no other protein derived from fish, and (5) the preparation of a fish sauce in a short period while inhibiting the generation of an unpleasant smell compared to a case where the protease prepared by the above method is not added in which at least one of a fish or a shellfish selected from the group consisting of Clupeidae order is immersed in an aqueous solution containing salts in as high salt concentration as about 8% to 24% and the protease prepared by the above method is added to it and fermented for about 1 to 11 months. The method is used for the preparation of a fish case which is used in an example from the present invention Nucleic acid encoding human UDP-GalNAc:polypeptide N-cetylgalactosaminyltransferase 10 protein is useful to diagnose, prevent and treat disorders associated with reduced or over expression of the Human, UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10; pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning; Gaps .; 0 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; Indels Sequence 17 BP; 6 A; 7 C; 2 G; 0 T; 2 U; 0 Other; Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:80. 0; Mismatches BP 829 2001WO-US000666. 2001WO-US000667. 2001WO-US000668. 30-JAN-2001; 2001WO-US000669. 30-JAN-2001; 2001WO-US000670. 23-MAY-2001; 2001US-00864761. 25-JAN-2002; 2002EP-00001161. 2001WO-US000665 86.78; 30-AUG-2001; 2001US-0315984P ABV85087 standard; DNA; 17 15 rcargerregereag 1 (first entry) ΰ Local Similarity 86.7 es 13; Conservative 815 TCAGGGTTGGCTGTG Gu Y, Nguyen WPI; 2002-724954/79. (AEOM-) AEOMICA INC. encoded protein. 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; EP1243660-A2 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 11-DEC-2002 25-SEP-2002 Synthetic. ABV85087; Zhang J, Query Match Matches RESULT 745 Ното ABV85087 \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$ X A X A X A X A X A X A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A X A 8 ó

ò

·,

.**.** 

```
Nucleic acid encoding human UDP-GalNAc:polypeptide N-cetylgalactosaminyltransferase 10 protein is useful to diagnose, prevent and treat disorders associated with reduced or over expression of the encoded protein.
                    The present invention describes an isolated nucleic acid (I) encoding a human UDP-GalNAC:polypeptide N-acetylgalactosaminyltransferase 10 (pp-GaNTase 10, BC 2.4.1.41) protein. Human pp-GaNTase 10 is located to chromosome 7411.2. (I) can be used in gene therapy. Molecules of the present invention can be used in therapy, particularly to prevent or treat a disorder associated with decreased expression or activity of pp-GaNTase. The sequences given in ABV85011 to ABV86699 and ABP53502 to ABP53504 are given in the exemplification of the present invention. N.B. The sequence data for this parent is not represented in the printed specification but is based on sequence information supplied by the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10; pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;
                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                     ·;
                                                                                                                                                                                                                                          Length 17;
                                                                                                                                                                                                                                                                     2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:81.
                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 6.4e+02;
iive 0; Mismatches 2;
                                                                                                                                                                                                        Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
Example 2; SEQ ID NO 80; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-JAN-2002; 2002EP-00001161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001US-0315984P
                                                                                                                                                                                                                                                                                                       952 AGAAGAGCCAAATTG 966
                                                                                                                                                                                                                                                                                                                                   AGAGGGCCAAAGTG 16
                                                                                                                                                                                                                                                                                                                                                                                                                ABV85088 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zhang J, Gu Y, Nguyen
                                                                                                                                                                                 European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-724954/79.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                          Local Similarity
nes 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EP1243660-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            11-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                     C)
                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV85088;
                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ношо
                                                                                                                                                                                                                                                                                                                                                                                                 ABV85088
                                                                                                                                                                                                                                                                                                                                                                                                                                q
   XX CCCCCCCCCCXXX
                                                                                                                                                                                                                                                                                                          ö
```

The present invention describes an isolated nucleic acid (I) encoding a

Example 2; SEQ ID NO 81; 59pp; English

```
Nucleic acid encoding human UDP-GalNAc:polypeptide N-cerylgalactosaminyltransferase 10 protein is useful to diagnose, prevent and treat disorders associated with reduced or over expression of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The present invention describes an isolated nucleic acid (I) encoding a human UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10 (pp-GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to chromosome 7q11.2. (I) can be used in gene therapy. Molecules of the
                                                                 −ďď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10;
pp-GaNTase 10; EC 2.4.1.41; chromosome 7q11.2; gene therapy; scanning;
human UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 10 (pp-GaNTase 10, EC 2.4.1.41) protein. Human pp-GaNTase 10 is located to chromosome 7411.2. (1) can be used in gene therapy. Molecules of the present invention can be used in therapy, particularly to prevent or treat a disorder associated with decreased expression or activity of pantase. The sequences given in ABVBSG11 to ABVBSG89 and ABPSS502 to ABPSG89 and ABPSS502 to The sequence data for this patent is not represented in the printed specification but is based on sequence information supplied by the
                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                   .,
                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human pp-GaNTase 10 scanning 17-mer SEQ ID NO:79.
                                                                                                                                                                      Sequence 17 BP; 7 A; 2 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; SEQ ID NO 79; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                             ABV85086 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US000664.
2001WO-US000665.
2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001US-00864761
2001US-0315984P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2002EP-00001161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001WO-US000667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000670
                                                                                                                                                                                                                                                                    996
                                                                                                                                                                                                                                                                                                1 AGAAGAGTCAAAGTG 15
                                                                                                                                                                                                                                                                    952 AGAAGAGCCAAATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gu Y, Nguyen
                                                                                                                                                                                                                                        Conservative
                                                                                                                                              European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-724954/79.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                    Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               encoded protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-AUG-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EP1243660-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                        11-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zhang J,
                                                                                                                                                                                                                                                                                                                                                                                                             ABV85086;
                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                RESULT 747
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                ABV85086
                                                                                                                                                                                                                                                                                                                                                                                             5555555555X8
```

ö

```
Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss; o-methyl modification; LNA modification; phosphorothioate linkage; DNA alteration; environmental tolerance; hygromycin-B; abbiotic stress tolerance; improved nutritional value; hygromycin-B; amino acid over production; herbicide resistance; hygromycin; prophyric herbicide resistance; sulphonylurea herbicide resistance; porphyric herbicide resistance; triazine resistance; disease resistance; modified oil production; modified starch production; waxy starch; altered floral morphology; male-sterile plant; albino mutant; modified fatty acid content; reduced plant; albino modified fatty acid content; reduced almicate production; albino plant; increased stearate production; reduced linolenic acid production;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New oligonucleotides with modified nuclease-resistant termini, useful for creating plants with desired phenotypes, e.g. stress tolerance, improved nutritional value, herbicide or disease resistance, or modified oil
present invention can be used in therapy, particularly to prevent or treat a disorder associated with decreased expression or activity of pp-GaNTase. The sequences given in ABV8501 to ABV86689 and ABP53502 to ABP53504 are given in the exemplification of the present invention. N.B. The sequence data for this parent is not represented in the printed specification but is based on sequence information supplied by the
                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Stress tolerance conferring genome altering oligonucleotide #100.
                                                                                                                                                                                                                                                                                                                                                                                                                                  ·
0
                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                    Sequence 17 BP; 7 A; 1 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kim J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 7; Page 102; 220pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rice MC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-OCT-2000; 2000US-0244989P. 27-MAR-2001; 2001US-00818875.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUN-2000; 2000US-0208538P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                952 AGAAGAGCCAAATTG 966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-JUN-2001; 2001WO-US017672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 AGAAGAGTCAAAGTG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABK25632 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  photosynthetic process.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gamper HB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (UYDE ) UNIV DELAWARE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Arabidopsis thaliana.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-106307/14.
                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                              specification but
European Patent Of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200192512-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      production
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABK25632;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kmiec
                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 74
ABK25632/
TD ABK25632/
XX ABK2
XX ABK2
XX ABK2
XX ABK2
XX ABK2
XX Chro
DD Op-A
XX Chro
XX Ch
   555555555X8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Š
```

The invention relates to an oligonucleotide for targeted alteration of a genetic sequence, which comprises a single-stranded oligonucleotide having a DNA domain. The DNA domain has at least one mismatch with respect to the genetic sequence to be altered and further comprises chemical modifications of the oligonucleotide. The chemical modifications

for

consist of o-methyl modification, an LNA modification, two or more phosphorothioate linkages on a terminus, or a combination of any two or more of these modifications. The oligonucleotides are useful for directing repair or alteration of plant genetic information. The oligonucleotides are particularly useful for creating plants with desired phenotypes, e.g. environmental or abiotic stress tolerance, improved conferring amino acid over production), herbicide resistance (e.g. ultritional value (e.g. altering amino acid over production), herbicide resistance (e.g. resistance, porphyric herbicide resistance en triazine resistance), disease resistance, modified oil production of waxy starch), altered floral morphology (e.g. male-sterile plants) or modified fatty acid content (e.g. reduced palmitate, increased stearate or reduced linolenic acid). The oligonucleotides are also useful for producing albino mutants for the analysis of photosynthetic processes. This sequence represents a genome · 0 Chromosomal genomic alteration; genome altering oligonucleotide; PCR, ss, o-methyl modification; LNA modification; phosphorothioate linkage; DNA repair; DNA alteration; environmental tolerance; hydromycin-bona abiotic stress tolerance; improved nutritional value; hydromycin-brindazolic stress tolerance; improved nutritional value; hydromycin-brindazolic amino acid over production; herbicide resistance; glyphosate resistance; porphyric herbicide resistance; sulphonylurea herbicide resistance; porphyric herbicide resistance; triazine resistance; disease resistance; altered floral morphology; male-sterile plant; albino mutant; modified in production; albino mutant; modified stearet production; reduced plant; abino mutant; increased stearet production; reduced linolenic acid production; New oligonucleotides with modified nuclease-resistant termini, useful for creating plants with desired phenotypes, e.g. stress tolerance, improved Gaps Male-sterile plant producing genome altering oligonucleotide #75. 0 4.1%; Score 11.8; DB 1; Length 17; larity 86.7%; Pred. No. 6.4e+02; Conservative 0; Mismatches 2; Indels Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 U; 0 Other; altering oligonucleotide of the invention ٩. BP. 01-JUN-2001; 2001WO-US017672, 01-JUN-2000; 2000US-0208538P. 2000US-0244989P. 2001US-00818875. 837 TCTTCTCTGAAGACA 851 rcrrcrcrdaacaaa 2 ABK25175 standard; DNA; 17 (first entry) photosynthetic process. UYDE ) UNIV DELAWARE Gamper HB, WPI; 2002-106307/14. Local Similarity les 13; Conserv Nicotiana tabacum. WO200192512-A2. 27-MAR-2001; 30-OCT-2000; 09-APR-2002 06-DEC-2001 Synthetic. Kmiec EB, 16 ABK25175; Query Match RESULT 749 Matches ABK25175, H D D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X D X à

```
nutritional value, herbicide or disease resistance, or modified oil
                                                    production.
```

Claim 7; Page 76; 220pp; English.

genetic sequence, which comprises a single-stranded oligonuclection or a genetic sequence, which comprises a single-stranded oligonuclection having a DNA domain. The DNA domain has at least one mismatch with respect to the genetic sequence to be altered and further comprises chemical modifications of the oligonuclectide. The chemical modifications of the oligonuclectide. The chemical modifications of the oligonuclectide. The chemical modifications of the oligonuclectides. The oligonuclectides are particularly useful for more of these modifications. The oligonuclectides are useful for directing repair or alteration of plant genetic information. The oligonuclectides are particularly useful for reating plants with desired phenotypes, e.g. environmental or abiotic stress tolerance, improved nutritional value (e.g. altering amino acid content of plants or conferring amino acid over production), herbicide resistance (e.g. organization over production), herbicide resistance, porphyric herbicide resistance or triazine resistance, cidicases resistance, modified oil production, modified starch production (e.g. increased starch or production of waxy starch), altered floral corpusors or production of waxy starch), altered floral corpusors or production of waxy starch), altered floral corpusors of photosynthetic plants or modified fatty acid content corpusors of photosynthetic processes. This sequence represents a genome analysis of photosynthetic processes. This sequence represents a genome corpusors of the invention corpusors. of a invention relates to an oligonucleotide for targeted alteration

Sequence 17 BP; 7 A; 3 C; 3 G; 4 T; 0 U; 0 Other;

0; 4.1%; Score 11.8; DB 1; Length 17; 66.7%; Pred. No. 6.4e+02; ve 0; Mismatches 2; Indels 967 ACTCTCTAAATCTGG 981 86.7%; 16 ATTCTCTAGATCTGG 2 13; Conservative Best Local Similarity Query Match Matches ð qq

ö

Gaps

Stress tolerance conferring genome altering oligonucleotide #99. ABK25631 standard; DNA; 17 BP. 09-APR-2002 ABK25631; RESULT 750 ABK2563 

(first entry)

Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss; o-methyl modification; LNA modification; phosphorothioate linkage; blink repair; DNA alteration; environmental tolerance; hygromycin-B; abiotic stress tolerance; improved nutritional value; hygromycin, primer; amino acid over production; herbicide resistance; glyphosate resistance; imidazolinone herbicide resistance; sulphonylurea herbicide resistance; modified oil production; modified starch production; modified starch production; waxy starch; altered floral morphology; mall-sterile plant; albino mutant; modified fatty acid content; reduced palmitate production; albino plant; phonography in the production; reduced plantiate production; albino plant; phonography in the production; reduced linolenic acid production;

Arabidopsis thaliana Synthetic

photosynthetic process

MO200192512-A2.

06-DEC-2001

01-JUN-2001; 2001WO-US017672.

01-JUN-2000; 2000US-0208538P.

27-MAR-2001; 2001US-00818875

(UYDE ) UNIV DELAWARE

Kim J; Rice MC, Gamper HB, Kmiec EB,

WPI; 2002-106307/14.

New oligonucleotides with modified nuclease-resistant termini, useful for creating plants with desired phenotypes, e.g. stress tolerance, improved nutritional value, herbicide or disease resistance, or modified oil 

production.

quentic sequence, which comprises a single-stranded oligomucleotide
c genetic sequence, which comprises a single-stranded oligomucleotide
having a DNA domain. The DNA domain has at least one mismatch with
c having a DNA domain. The DNA domain has at least one mismatch with
c respect to the genetic sequence to be altered and further comprises
c chemical modifications of the oligomucleotide. The chemical modifications
c consist of o-methyl modification, an LNA modification, two or more
c consist of o-methyl modifications. The Modification of plant genetic information of any two or
more of these modifications. The oligomucleotides are useful for
directing repair or alteration of plant genetic information. The
coligomucleotides are particularly useful for creating plants with desired
phenotypes, e.g. environmental or abiotic stress tolerance, improved
contexting amino acid content of plants or
nutritional value (e.g. altering amino acid content of plants or
conferring amino acid over production), herbicide resistance, improved
c glyphosate resistance, imidazolinone and sulphonylurea herbicide
c glyphosate resistance, modified oil production of waxy starch), altered floral
c morphology (e.g. male-sterile plants) or modified fatty acid content
c morphology (e.g. male-sterile plants) or modified fatty acid content
c c grant expective or production of waxy starch), altered floral
c malysis of photosynthetic processes. This sequence represents a genome
c altering oligomucleotide of the invention ಗ ŏ The invention relates to an oligonucleotide for targeted alteration Claim 7; Page 102; 220pp; English.

Sequence 17 BP; 5 A; 5 C; 2 G; 5 T; 0 U; 0 Other;

Gaps ., 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; Indels 0; Mismatches Query Match
Best Local Similarity 86.7
Matches 13; Conservative

. 0

837 TCTTCTCTGAAGACA 851 2 rcrrcrcrcaacaa 16 g ð

RESULT 751

ABK25176 ID ABK25176 standard; DNA; 17 BP.

ABK25176; 

09-APR-2002 (first entry)

Male-sterile plant producing genome altering oligonucleotide #76.

Chromosomal genomic alteration; genome altering oligonucleotide; PCR; ss; o-methyl modification; LNA modification; phosphorothioate linkage; bub repair; DNA alteration; environmental tolerance; hygromycin; abiotic stress tolerance; improved nutritional value; hygromycin; primer; amino acid over production; herbicide resistance; glyphosate resistance; porphyric herbicide resistance; sulphonylurea herbicide resistance; porphyric herbicide resistance; triazine resistance; modified oil production; modified starch production; waxy starch; and altered floral morphology; male sterile plant; albino mutant; increased stearate production; reduced palmitate production; albino plant; increased stearate production; reduced linolenic acid production; photosynthetic process.

Nicotiana tabacum

```
The present invention relates to human testis expressed Patched like

protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL

chas two isoforms, with a few single base pair differences between the

two. One of the single base pair changes introduces a premature stop

codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL

codon in HTPL-S (S for short) compared for the HTPL plays a role similar

codon in HTPL-S (S for short) cansed for materion in HTPL, and in

codor in the resplacing a disorder caused by mutation in HTPL, and in

codor in HTPL. Such disorders and disorders of restis, or adrenal, adult and

codor in HTPL. Such disorders include disorders of testis, or adrenal, adult and

codor in HTPL. Such dispositic markers and potenial therapeutic agents for

colinically useful diagnostic markers and potenial therapeutic acids are

compared to the present oligonucleotide was used in an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seguence 17 BP; 2 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 11.8; DB 1;
Pred. No. 6.4e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human HTPL scanning oligonucleotide SEQ ID 457.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Example 2; Page 123; 718pp; English.
                                                                                                                                                                                                                                                         2001MO-US000664.
2001MO-US000665.
2001MO-US000667.
2001MO-US000668.
2001US-00864761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.1%;
                                                                                                                                                                                     2002EP-00001167
                                                                                                                                                                                                                                                                                                                                                                                                            09-OCT-2001; 2001US-0327898P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABV79211 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 GACAGCAGCCCTCT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  03-JAN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 777 GAGGCAGCCCCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-676582/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity
                                    Homo sapiens.
                                                                                    EP1229046-A2.
                                                                                                                                                                                  28-JAN-2002;
                                                                                                                                                                                                                                                                                 30-JAN-2001;
                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                     23-MAY-2001;
                                                                                                                                                                                                                                    30-JAN-2001;
                                                                                                                                                                                                                                                         30-JAN-2001;
                                                                                                                                      07-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABV79211;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhan J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 753
ABV79211/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      genetic sequence, which comprises a single-stranded oligonucleotide having a DNA domain. The DNA domain has at least one mismatch with respect to the genetic sequence to be altered and further comprises chemical modifications of the oligonucleotide. The chemical modifications of the oligonucleotide. The chemical modifications phosphorothicate linkages on a terminus, or a combination of any two or more of these modifications. The oligonucleotides are useful for more of these modifications of plant genetic information. The oligonucleotides are particularly useful for creating plants with desired phenotypes, e.g. environmental or abiotic stress tolerance, improved nutritional value (e.g. altering amino acid content of plants or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        conferring amino acid over production), herbicide resistance (e.g. glyphosate resistance, imidazolinone and sulphonylurea herbicide resistance, prophyric herbicide resistance or triazine resistance), disease resistance, modified oil production, modified starch production (e.g. increased starch or production of waxy starch), altered floral morphology (e.g. male-sterile plants) or modified fatty acid content (e.g. reduced palmitate, increased stearate or reduced linolenic acid). The oligonucleotides are also useful for producing albino mutants for the analysis of photosynthetic processes. This sequence represents a genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                    New oligonucleotides with modified nuclease-resistant termini, useful for creating plants with desired phenotypes, e.g. stress tolerance, improved nutritional value, herbicide or disease resistance, or modified oil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention relates to an oligonucleotide for targeted alteration of a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis sypressed Parched like protean; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 11.8; DB 1; Length 17; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 4 A; 3 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human HTPL scanning oligonucleotide SEQ ID 456.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          altering oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                          Gamper HB, Rice MC, Kim J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 7; Page 76; 220pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABV79210 standard; DNA; 17 BP.
                                                                                                                                                                                                  01-JUN-2000; 2000US-0208538P.
30-OCT-2000; 2000US-0244989P.
27-MAR-2001; 2001US-00818875.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.1%;
86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            981
                                                                                                                                                     01-JUN-2001; 2001WO-US017672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 ATTCTCTAGATCTGG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        03-JAN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 86.74
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          967 ACTCTCTAAATCTGG
                                                                                                                                                                                                                                                                                                   (UYDE ) UNIV DELAWARE
                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-106307/14.
                                                    WO200192512-A2.
                                                                                                      06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                     Kmiec EB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     production
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABV79210;
```

ö

Gaps

0;

Length 17; Indels Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver;

RESULT

à 셤

Mon Jul 12 11:21:14 2004

```
protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB9850). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stopp codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL chares an overall structure organisation with the Patched protein. The shares an overall structure organisation with the Patched protein. The shares are structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was important in regulating a potential tumour suppressor. HTPL is consecuted to human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human CHTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic agents for calinically useful diagnostic markers and potenial therapeutic agents for example from the invention
germ cell development; bone marrow; brain; kidney; lung; placenta;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel isolated human testis expressed Patched like protein (HTPL), use for identifying agonist and antagonist and specific binding partners, for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to human testis expressed Patched like
                        prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 123; 718pp; English
                                                                                                                                                                                                                                                                                           30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
33-AXY-2001; 2001US-0327898P.
                                                                                                                                                                                            28-JAN-2002; 2002EP-00001167.
                                                                                                                                                                                                                                                          2001WQ-US000664.
2001WO-US000665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       86.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                            (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-676582/73
                                                                                                                                                                                                                                                        30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
23-MAY-2001;
                                                                  Homo sapiens
                                                                                                        EP1229046-A2
                                                                                                                                                                                                                                      30-JAN-2001;
                                                                                                                                                  07-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zhan J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tches
  ò
```

```
Gaps
                                                                                  .
                                    4.1%; Score 11.8; DB 1; Length 17; 06.7%; Pred. No. 6.4e+02;
                                                                               Indels
Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                        777 GAGGGCAGCCCCTCT 791
```

```
915 ATTATCATCACCACC 929
                                                                                                                              ABK17403 standard; RNA; 17
Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                             ATTACAATCACCACC
                                                                                                                                                                            09-APR-2002
                                                                                                                                                      ABK17403;
                                                                                                       RESULT 755
                                                                                                                     ABK17403
                                                                                                                              UXXXX
                                                                      g
                                                ð
   0
                                                                                                                                                                              Human HTPL scanning oligonucleotide SEQ ID 1566.
                                                                                                          ABV80320 standard; DNA; 17 BP.
                                        GACAGCACCCTCT 1
                                                                                                                                                       (first entry)
                                                                                                                                                       03-JAN-2003
                                                  15
                                                                                    RESULT 754
```

ABV80320

XEXEXEX

ó

Gaps .

4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; tive 0; Mismatches 2; Indels

BP.

(first entry)

```
The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-8 (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human control of such disorder associated with decreased expression or activity of human changes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potental therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention
Human, gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 6 A; 7 C; 0 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 2; Page 269; 718pp; English.
                                                                                                                                                                                                                                                                                                 2001WO-US000664.
2001WO-US000665.
2001WO-US000667.
2001WO-US000669.
2001WG-US000669.
2001UG-00864761.
                                                                                                                                                                                                                                       2002EP-00001167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-676582/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
30-JAN-2001;
23-MAY-2001;
                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                       28-JAN-2002;
                                                                                                                                                       EP1229046-A2
                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                  09-OCT-2001;
                                                                                                                                                                                                                                                                                  30-JAN-2001;
                                                                                                                                                                                               07-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Zhan J;
```

useful rs, and

Human, hammerhead ribozyme, cytostatic; antitumour, antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; Novel polynucleotide which down regulates expression of Ets-related gen useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome. Mcswiggen JA, Mclaughlin F, Randi AM; Human ERG hammerhead ribozyme target sequence, Seg ID No 50. 4; Page 59; 149pp; English. 16-MAY-2001; 2001WO-US015866. 6-MAY-2000; 2000US-00572021. Von Carlowitz I, (RIBO-) RIBOZYME PHARM INC. (GLAX ) GLAXO GROUP LTD. WPI; 2002-082995/11. WO200188124-A2. Homo sapiens 22-NOV-2001 amberzyme. Jarvis T, DE STANDARD SE STA

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, well and conditions acidenced in the cancer and conditions acidenced in the cancer and would healing. (I) is useful for treating a patient having a condition soler-Weber-rendu syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies the treatment. The method comprises the use of one or more therapies conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or cell, by contacting (I) is useful for reducing ERG activity in a cell, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically caramine genetic drift and mutations with ERG gene or ERG fusion genes. ABK1334-ABK22719 represent nucleic acids, including antisense and caramic muchaic modecules which regulate expression of ERG, and caramic muchaic muchaic modecules which regulate expression of ERG, and caramic muchaic mutation.

Sequence 17 BP; 3 A; 3 C; 6 G; 0 T; 5 U; 0 Other;

.; 0 Score 11.8; DB 1; Length 17; Pred. No. 6.4e+02; 5; Mismatches 2; Indels 53.3%; Local Similarity 53.3 hes 8; Conservative Query Match Matches

.; 0

Gaps

816 CAGGGTTGGCTGTGT 830 ||||| ::||||:| CAGGAUUGGCUGUCU 17 m

ABQ73490 standard; DNA; 17 BP 

ABQ73490;

(first entry) 02-OCT-2002

HPV-16 PCR primer oCCB-322

Pre-trans-splicing molecule; PTM; spliceosome; cytostatic; gene therapy; immunosuppressive, antimicrobial; gene regulation, gene repair; cancer; targeted cell death; genetic disorder; infectious disorder, autoimmune disease; proliferative disorder; PCR primer; ss.

papillomavirus. Human

Synthetic.

WO200253581-A2.

11-JUL-2002

2002WO-US000416. 08-JAN-2002;

08-JAN-2001;

08-JAN-2001; 2001US-00756096. 08-JAN-2001; 2001US-00756097. 20-APR-2001; 2001US-00938858. 29-ANG-2001; 2001US-00941492.

(INTR-) INTRONN INC.

Puttaraju M; Baker CC, Garcia-Blanco MA, Chao H; Mitchell LG, Mansfield GS,

WPI; 2002-566693/60.

Novel cell having pre-trans-splicing molecules with target binding domains that target binding of PTM to pre-mRNA, 3' or 5' splice region, spacer region, nucleotide sequence to be trans-spliced to target-pre-

Example; Page 80; 229pp; English.

The present invention describes a cell (I) comprising pre-trans-splicing molecules (PTMS) (II) which have one or more target binding domains (IIa) that target binding of PTM to pre-mRNA, 3' splice region (IIa) that target binding of PTM to pre-mRNA, 3' splice region (IIb) that includes branch point pyrimidine tract and 3' splice acceptor site, or 5' splice site (IIc), spacer region (IId) that separates RNA splice site from target binding domain, and nucleotide sequence to (IIe) be transspliced to target-pre-mRNA, Optionally, the cell comprises (II) either comprising: (A) (IIb) and (IIe), or (B) (IIC), (IId) and (IIe). The cell may comprises a recombinant vector expressing (II) (I) has cytostatic, immunosuppressive and antimicrobial activities, and can be used in gene therapy. (II) comprising one or more (preferably two or more) (IIa) and (IIe), (IId) and (IIe), or (II) comprising either (A) or (B) (excluding (IId)), is useful for producing a chimeric RNA molecule in a cell which involves contacting a target pre-mRNA expressed in the cell with that is recognised by nuclear splicing components. The chimeric RNA produced comprises sequences encoding a toxin or translatable protein. The nucleotide sequence to be trans-spliced to target pre-mRNA preferably comprises nucleotide sequences comprising exons 1-10 of cystic fibrosis trans-membrane conductance regulator (CFTR). The chimeric RNA molecule produced using (II) which either comprises (A) or (B) further comprises a nucleotide sequence tag (I) can be used for gene regulation gene repair and targeted cell death. (I) can be used for the treatment of proliferative disorders such as cancer and to regulate gene expression in plants. ABQ73414 to ABQ73536 represent sequences used in the gene repair and targeted cell death. (1) can be used for the treatment of various diseases including genetic, infectious or autoimmune diseases and exemplification of the present invention

Sequence 17 BP; 5 A; 8 C; 2 G; 2 T; 0 U; 0 Other;

Query Match

DB 1; Length 17; 4.1%; Score 11.8;

```
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FR2826373-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-DEC-2002
                                      Homo sapiens
                                                                                                                                                    Tuijnder M,
                                                                          27-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACC53842;
                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 759
                                                                                                                                                                                                                                                                                                                                                                                                                                              ACC53842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                       d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                     The
                                                                                                                                                                                                                                                                                                                                                                   New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                   with tunour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                           sequence represents an isolated nucleic acid sequence associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
            Gaps
                                                                                                                                                                       ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ,
0
            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; rive 0; Mismatches 2; Indels
            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 4 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
  6.4e+02;
   Pred. No. 6.46
); Mismatches
                                                                                                                                                        Human tumour suppressor sequence #1899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human tumour suppressor sequence #135
                                                                                                                                                                                                                                                                                                                                  Amson R;
                                                                                                                                                                                                                                                                                                               (MOLE-) MOLECULAR ENGINES LAB SA
                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 479; 798pp; French
             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC51368 standard; DNA; 17 BP
                                                                                                 ACC53132 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                          20-JUN-2001; 2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 855 TCCTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                            20-JUN-2001; 2001FR-00008139.
                                717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rccreecreadare 17
    86.7%;
                                                  16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                 Tuijnder M, Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                703 TCCAGCGAGTCCCAG
                                               TCCACCCAGTCCCAG
              Conservative
                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-250498/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 13; Conserv
     Best Local Similarity
                                                                                                                                                                                                                                     FR2826373-A1.
                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-JUN-2003
                                                                                                                                                                                                                                                        27-DEC-2002.
                                                                                                                                        27-JUN-2003
                13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACC51368
                                                   N
                                                                                                                     ACC53132;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 758
ACC51368/0
                                                                                 RESULT 757
               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    XEXEXEX
                                                                                                                               à
                                   à
                                                    g
```

```
New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
tumour regression; apoptosis; virus resistance; diagnosis;
cellular degeneration.
ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 10 A; 2 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human tumour suppressor sequence #2609.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tuijnder M, Telerman A, Amson R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Amson R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR ENGINES LAB SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 71; 798pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20-JUN-2001; 2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-JUN-2001; 2001FR-00008139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     846
                                                                                                                                                                                                                                                                                                                              20-JUN-2001; 2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                                                                        20-JUN-2001; 2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC53842 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 retrirerregrica 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 85...
Loca 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     832 TCTTTTCTTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-250498/25.
```

0;

The

WPI; 2003-250498/25.

```
New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New nucleic acid sequences associated with tumor suppression, regression,
                                                                                                                                          This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           with tumour suppression or regression, apoptosis or virus resistance, invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This sequence represents an isolated nucleic acid sequence associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                          Sequence 17 BP; 2 A; 3 C; 1 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human tumour suppressor sequence #2279.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Amson R;
                                                                                                            Claim 1; Page 642; 798pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MOLE-) MOLECULAR ENGINES LAB SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 566; 798pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC53512 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-JUN-2001; 2001FR-00008139.
                                                                                                                                                                                                                                                                                                                                                                                                       TCTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-JUN-2001; 2001FR-00008139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-250498/25.
                                                                                                                                                                                                                                                                                                                                              Local Similarity
es 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FR2826373-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tuijnder M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                       830
                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC53512;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC53512/c
                                                                                                                                                                                                                                                                                                                                                                 Matches
```

·;

Gaps

·.

The

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This sequence represents an isolated nucleic acid sequence associated with tumour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     characterized by development of tumour cells or cellular degeneration
                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                         ss; tumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. I invention is used to diagnose or treat viral disease or disease
                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New nucleic acid sequences associated with tumor suppression,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.1%; Score 11.8; DB 1; Length 17; ilarity 86.7%; Pred. No. 6.4e+02; Conservative 0; Mismatches 2; Indels
                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human tumour endothelial marker TEM 13 DNA long tag #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 7 A; 6 C; 1 G; 3 T; 0 U; 0 Other;
 Score 11.8; DB 1;
Pred. No. 6.4e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                              Human tumour suppressor sequence #697.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Amson R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 201; 798pp; French.
                                                                                                                                                           ACC51930 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP
                                                                                                                                                                                                                                                                                                                                                                                                                     20-JUN-2001; 2001FR-00008139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    932
                                                         832 TCTTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-JUN-2001; 2001FR-00008139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 ATCATCACAATCACC 16
                                                                                    rcrrrrcrrcrraga 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABX72083 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                  (first entry)
                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    918 ATCATCACCACCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-250498/25.
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
es 13; Conserv
                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                              FR2826373-A1.
                                                                                                                                                                                                                  27-JUN-2003
                             Matches 13;
                                                                                                                                                                                                                                                                                                                                                                                          27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tuijnder M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-MAR-2003
                                                                                    17
                                                                                                                                                                                      ACC51930;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABX72083;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABX72083
                                                                                                                              RESULT
                                                                                   염
                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BXAXBXB
```

The

Sequence 17 BP; 10 A; 1 C; 4 G; 2 T; 0 U; 0 Other;

WO2003016494-A2.

```
The present invention relates to a novel method for the isolation of endothelial cells (ECs), and the identification of genes expressed in normal and tumour ECs. Tumour endothelial marker (TEM), normal endothelial marker (TEM), normal and identified in human ECs. The human EC marker proteins and the polynucleotide sequences encoding them are useful for detecting, diagnosing or treating tumours as well as polycystic kidney disease, diabetic retinopathy, rheumatoid arthritis, and psoriasis. They are also useful for inhibiting necangiogenesis or tumour angiogenesis, for inducing an immune response to tumour endothelial cells in a patient, or for identifying candidate drugs for treating tumours. ABX72067-ABX72116 represent human TEM DNA tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           purified human transmembrane protein, designated as tumor endothelial
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3, diagnosing or treating tumors,
retinopathy, rheumatoid arthritis or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human; THBS2; vascular disease; cardiant; antiarteriosclerotic; stroke; cerebroprotective; gene therapy; coronary artery disease; ischaemia; myocardial infarction; peripheral vascular disease; pulmonary embolism; venous thromboembolism; forensic; paternity testing; primer; ss.
           Human, endothelial cell, EC, tumour endothelial cell; TEM, NEM, Tumour endothelial marker; normal endothelial marker; PEM; pan-endothelial marker; polycystic kidney disease; psoriasis; diabetic retinopathy, rheumatoid arthritis; tumour angiogenesis; necangiogenesis; immune response; cytostatic, antidiabetic; ophthalmological; antirheumatic; antiarthritic; antipsoriatic; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                  Kinzler KW, Vogelstein B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human vascular disease-associated primer SEQ ID 19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 5 A; 4 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.1%; Score 11.8; DB 1;
Best Local Similarity 86.7%; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         marker (TEM) 3, useful for detecting, polycystic kidney disease, diabetic re
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure, Page 360; 374pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                    Carson-Walter E, St Croix B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABQ77411 Standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                      11-APR-2001; 2001US-0282850P. 06-FEB-2002; 2002US-0354262P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             706 AGCGAGTCCCAGGAG 720
                                                                                                                                                                                                                                                                  10-APR-2002; 2002WO-US008253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2 AGTGAGACCCAGGAG 16
                                                                                                                                                                                                                                                                                                                                                              (UYJO) UNIV JOHNS HOPKINS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-MAY-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-093016/08.
                                                                                                                                                                                       WO200283874-A2
                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                              24-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   psoriasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABQ77411;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

```
candidate for a particular course of therapy to treat a vascular disease or disorder. The method comprises determining the identity of the nucleotide present at specific positions, or their complements, and identitying the subject as a candidate for a particular clinical course of therapy based on the identity of the nucleotide present in that specific position. The method can be used for identifying a subject who is a candidate for identity of the nucleotide present in that copredite position. The method can be used for identifying a subject who is a candidate for further dispositic evaluation of a vascular disease or disorder and selecting a clinical course of therapy. The products of the invention have cardiant, antiarteriosclerotic and cerebroprotective cortivity and can be used for gene therapy. The methods disclosed are useful for treating a vascular disease, e.g. atherosclerosis, coronary arcent y assender and a fingerprint for detecting the pulmonary embolism. The DNA sequences are useful as fingerprint for detecting different individuals within the same species applicable in forensic studies and paternity the testing. This sequence represents a primer used to illustrate the method
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Identifying a subject as a candidate for a particular course of therapy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes a novel method for identifying a subject as a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      to treat a vascular disease or disorder, e.g. stroke, myocardial infarction or ischemia by determining the identity of the nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tumour suppression related human fukutin oligo SEQ ID No 123.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17; 66.7%; Pred. No. 6.4e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 4 A; 7 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 64; Page 568; 568pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   present at specific positions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                      05-0CT-2001; 2001US-0327485P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          746 AGGGTCCCAGGGTCC 760
                                                                                                                                                16-AUG-2002; 2002WO-US026343
                                                                                                                                                                                                                    16-AUG-2001; 2001US-0313097P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABT34486 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 AGGGTCCCATGGTGC
                                                                                                                                                                                                                                                                                                                                                                    (VITI-) VITIVITY INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-300617/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               testing. This se
of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO2003025175-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                        Mccarthy J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-JUN-2003
                                                                    27-FEB-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABT34486;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABT34486/c
ID ABT344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SECOND CONTRACTOR SERVING SERV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              d
```

ö

·,

Gaps

27-MAR-2003

```
17-SEP-2002; 2002WO-IB004208
```

```
The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for vector or antibodies directed against the polypeptides acids, cells containing the vector or antibodies directed against the polypeptides and or cells containing the corporation, specifically cancer but also Alzheimer's disease and degeneration, specifically cancer but also Alzheimer's disease and containing the schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these containing the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the horsonion continuers of protein chips. The nucleic acid sequences of the horsonion can be used in gene chips. The nucleic acid sequences of the horsonion can be used in gene contained to a sequence of the provence of the 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 48; 720pp; French.
                                                                                                                                                                                                                                                                                                          Telerman A, Amson R, Tuijnder M;
                                                                                                                                                                 (MOLE-) MOLECULAR ENGINES LAB.
17-SEP-2001; 2001FR-00011978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-313353/30.
```

```
.
0
                                                                                    Gaps
                                                                                    .;
0
                                         4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ative 0; Mismatches 2; Indels
Sequence 17 BP; 2 A; 2 C; 8 G; 5 T; 0 U; 0 Other;
                                                         Best Local Similarity 86.73
Matches 13; Conservative
                                         Query Match
```

ABT34804 standard; DNA; 17 BP ABT34804;

12-JUN-2003 (first entry)

Tumour suppression related human fukutin oligo SEQ ID No 441.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens

WO2003025175-A2.

27-MAR-2003

17-SEP-2002; 2002WO-IB004208

17-SEP-2001; 2001FR-00011978

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M; relerman A, Amson R,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 85; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, diven in the specification, a sequence containing at least 15 consecutive condidios from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that of alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acid acids of the invention are useful as probes and primers for detecting, identifying admol and for amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, concaining the polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression contained buman fukutin oligonucleotide of the invention can be used in gene contained buman fukutin oligonucleotide for the invention can be used in gene contained buman fukutin oligonucleotide for the invention can be used in gene contained buman fukutin oligonucleotide for the invention can be used in gene contained the contained the contained the contained the contained to the contained to generate and contained to generate and contained to generate and contained to gen 

Sequence 17 BP; 6 A; 7 C; 3 G; 1 T; 0 U; 0 Other;

· 0 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ive 0; Mismatches 2; Indels 2; Indels Local Similarity 86.7 nes 13; Conservative Query Match Best Loca Matches

·.

Gaps

918 ATCATCACCACCACC 932 2 ATCAGCACCAGCACC 16 ð

ABT37773 standard; DNA; 17 BP. ABT37773; RESULT 766 ABT37773/c 

(first entry) 12-JUN-2003

Tumour suppression related human fukutin oligo SEQ ID No 3410.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

402003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

Tuijnder M;

```
The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic caids of the invention are useful as probes and primers for detecting, dentifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as [anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and degeneration, specifically cancer but also Alzheimer's disease and patient samples is useful for diagnosis and/or prognosis of these chips. The polypeptides can also be used to generate antibodies, and chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression crelated human fukutin oligomucleotide of the invention
                                                                                                                                                         New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 10 A; 2 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                  Disclosure; Page 432; 720pp; French.
                 (MOLE-) MOLECULAR ENGINES LAB.
                                                                       Telerman A, Amson R,
                                                                                                                WPI; 2003-313353/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABT38264;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABT38264/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

Gaps 0; Score 11.8; DB 1; Length 17; Pred. No. 6.4e+02; 0; Mismatches 2; Indels 4.1%; 832 TCTTTTCTTCTGA 846 17 rcrerrrrrrrcrcra 3 

; 0

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds. Tumour suppression related human fukutin oligo SEQ ID No 3901. ABT38264 standard; DNA; 17 BP. 12-JUN-2003 (first entry) 

17-SEP-2001; 2001FR-00011978. 17-SEP-2002; 2002WO-IB004208 WO2003025175-A2. 27-MAR-2003 Homo

(MOLE-) MOLECULAR ENGINES LAB.

The invention relates to a novel isolated 17 mer nucleic acid sequence, cg iven in the specification, a sequence containing at least 15 consecutive given in the specification, a sequence ontaining at least 15 consecutive nucleotides from the 17 mer sequence with, after optimal alighment, at least 80 % identity to the 17 mer sequence, a sequence that thybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, containing the nucleic acids, cells containing the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and continued and analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these chise and set the polypeptides can also be used to generate antibodies, and contained both the polypeptide and antibodies are useful as components of protein the polypeptide and antibodies are useful as components of protein the polypeptide and antibodies are useful as components of protein the polypeptides or also be used to generate antibodies, and contain the polypeptides or also be used to generate antibodies, and contain the polypeptides or also be the invention can be used in gene New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells. Disclosure; Page 490; 720pp; French. Tuijnder M; Telerman A, Amson R, WPI; 2003-313353/30. 

Gaps 0 Query Match
Best Local Similarity 86.7%; Pred. No. 6.4e+02;
Matches 13; Conservative 0; Mismatches 2; Indels Sequence 17 BP; 6 A; 4 C; 4 G; 3 T; 0 U; 0 Other; 869 GGAACACTTTCCTGA 883 δ

therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention

; 0

ABT36680 standard; DNA; 17 BP. 17 GGAAGTCTTTCCTGA 3 (first entry) 12-JUN-2003 ABT36680; RESULT 768 **ABT3668**0 q

Tumour suppression related human fukutin oligo SEQ ID No 2317.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds. (MOLE-) MOLECULAR ENGINES LAB 17-SEP-2001; 2001FR-00011978. 17-SEP-2002; 2002WO-IB004208. WO2003025175-A2. 27-MAR-2003. Ношо 

Telerman A, Amson R, Tuijnder M;

WPI; 2003-313353/30 

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 303; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that of alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, colpreptides, vectors containing the nucleic acids, cells containing the proparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell diseases that are characterised by development of parine nucleic acids in patient samples is useful for diagnosis and/or prognosis of these components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymetide sequence represents a tumour suppression contained buman fukutin oligonucleotide of the invention

Sequence 17 BP; 1 A; 5 C; 2 G; 9 T; 0 U; 0 Other;

4.1%; Score 11.8; DB 1; Length 17; 16.7%; Pred. No. 6.4e+02; Ve 0; Mismatches 2; Indels 86.78; est_Local Similarity 86.7 atches 13; Conservative Query Match Matches 8

830 TCTCTTTTCTCT 844 rererriecister 17 m

ABT38096 standard; DNA; 17 BP ABT38096; RESULT 769 

12-JUN-2003 (first entry)

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; Tumour suppression related human fukutin oligo SEQ ID No 3733. human fukutin;

Homo sapiens.

WO2003025175-A2

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M; relerman A, Amson R,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 470; 720pp; French

The invention relates to a novel isolated if mer nucleic acid sequence, given in the specification, a sequence, a sequence with, after optimal nucleotides from the 17 mer sequence, a sequence with, after optimal calignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, dentifying quadricylor amplicylor and for acids of the invention are useful as probes and primers for detecting, component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, colls containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for the preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tunours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in containing the polypeptides can also be used to generate antibodies, and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene the containing and antibodies are useful as components of protein the polypeptide and antibodies are useful as components of protein the contain and sequences of the invention can be used in gene the the polyment of sequences of the invention can be used in gene the the polyment of sequences of the provence of the services of the services and ser invention relates to a novel isolated 17 mer nucleic acid sequence tumour suppression therapy. This polynucleotide sequence represents a tume related human fukutin oligonucleotide of the invention 

Sequence 17 BP; 10 A; 1 C; 5 G; 1 T; 0 U; 0 Other;

Gaps . 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ive 0; Mismatches 2; Indels 13; Conservative Best Local Similarity Matches

. 0

ઠે g

; 0

Gaps 0; RESULT 770 ABT36538

BP ABT36538 standard; DNA; 17

ABT36538;

12-JUN-2003 (first entry)

Tumour suppression related human fukutin oligo SEQ ID No 2175. 

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

WO2003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB

Ξ Tuijnder Telerman A, Amson R,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated

with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 287; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, cgiven in the specification, a sequence containing at least 15 consecutive given in the specification, a sequence ontaining at least 15 consecutive nucleotides from the 17 mer sequence with, after optimal allowed a least 80 % identity to the 17 mer sequence that constitutions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic of any of them, or the corresponding RNA. The novel isolated nucleic confidentifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for component of a gene chip, in vitro as (anti)sense reagents, and for component of recombinant polypeptides. Any of the nucleic acids, colls containing the nucleic acids, cells containing the polypeptides are useful for corresponded against the supersponded against the polypeptides are useful for corresponded against the polypeptides and corresponded against the polypeptides and the expression of the polypeptides and the p diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention

Sequence 17 BP; 6 A; 3 C; 2 G; 6 T; 0 U; 0 Other;

Gaps ; DB 1; Length 17; 2; Indels 4.1%; Score 11.8; DB 1; 36.7%; Pred. No. 6.4e+02; ye 0; Mismatches 2; 0; 86.7%; 13; Conservative Sest Local Similarity Query Match Matches

837 TCTTCTCTGAAGACA 851 3 rcrrcrcrcaAAATA 17 ð g

ABT39383 standard; DNA; 17 BP. ABT39383/c RESULT

ABT39383; 

(first entry) 12-JUN-2003 Tumour suppression related human fukutin oligo SEQ ID No 5020.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

MO2003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208

17-SEP-2001; 2001FR-00011978.

Tuijnder M; (MOLE-) MOLECULAR ENGINES LAB.

Amson R, elerman A,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 620; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, cg iven in the specification, a sequence containing at least 15 consecutive given in the specification, a sequence ontaining at least 15 consecutive cc alignment, at least 80 % identity to the 17 mer sequence that alignment, at least 80 % identity to the 17 mer sequence that alignment, at least 80 % identity to the 17 mer sequence that converse of the invention are useful as probes and primers for detecting, acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, concaining the nucleic acids, cells containing the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell calenation, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in planes are the analysis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression related human fukutin oligonucleotide of the invention 

Sequence 17 BP; 7 A; 1 C; 5 G; 4 T; 0 U; 0 Other;

Gaps 0 4.1%; Score 11.8; DB 1; Length 17; 6.7%; Pred. No. 6.4e+02; ve 0; Mismatches 2; Indels 86.78; 13; Conservative Best Local Similarity Query Match Matches

.;

889 ACTIACTICICAGCI 903 16 ACTTACTTCTCTGAT 2 Š Dp

. 0

ACA06674 standard; RNA; 17 BP. RESULT 772

(first entry) 03-JUN-2003 NFKB sub-unit modulating inozyme substrate #493.

encirabine, radiation therapy, inflammatory disease, asthma; diabetes, rheumatoid arthritis, restenosis, Crohm's disease, obesity, ischaemia, gene therapy, autoimmuse disease, lupus, multiple sclerosis, sepsis, transplant/graft rejection, reperfusion injury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss. G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; prostate cancer; colorectal cancer; brain cancer; oesophageal cancer; stomach cancer; bladder cancer; paroreatic cancer; cervical cancer; head and neck cancer; varian cancer; melanoma; lymphoma; glioma; multidrug resistant cancer; REL-A specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate; Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;

Homo sapiens.

US2002177568-A1.

28-NOV-2002.

92US-00987132. 94US-00245466. 94US-00291932. 96US-00777916. 23-MAY-2001; 2001US-00864785. 07-DEC-1992; 18-MAY-1994; 15-AUG-1994; 23-DEC-1996; 

```
EP1281758-A2.
                                                                                      Homo sapiens
                                                                                           05-FEB-2003
                                                infection.
                                                                        ADA99599;
                                                                  RESULT 773
ADA99599/c
                                                         Matches
à
                                                              g
```

Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases. The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFRB), where (I) is an inozyme, zinzyme, G-claaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted too treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially MG/2+. The enzymatic antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or therapies such as monoclonal antibodies, REL-A-specific inhibitors or the respection. chemotherapy including pacitraxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edatrexate, gemcitabine or radiation therapy. The enzymatic and antisense nucleic acid molecules are also useful for treating inflammatory disease such rheumatoid arthritis, restencisi, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury strous system (CNS) and myocardial), glomerulonephritis, lergic airway inflammation, inflammatory bowel disease or This sequence represents the substrate of a novel enzymatic Mcswiggen J, Draper KG; Claim 3; Page 34; 72pp; English. (STIN/) STINCHCOMB D T. (MCSW/) MCSWIGGEN J. (DRAP/) DRAPER K G. (central nervous system sepsis, allergic airway nucleic acid molecule WPI; 2003-340953/32 Stinchcomb DT,

Score 11.8; DB 1; Length 17; Pred. No. 6.4e+02; 3; Mismatches 2; Indels Sequence 17 BP; 4 A; 6 C; 1 G; 0 T; 6 U; 0 Other; 4.1%; 10; Conservative Best Local Similarity

798 AAGAGCICTCCTCCA 812 AAGACUUCUCCUCCA 15

ADA99599 standard; DNA; 17 BP

20-NOV-2003 (first entry)

Human MDZ3 scanning oligonucleotide SEQ ID 588.

Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MD23; MD24; MD21; Chromosome 7g22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15g26.1; cancer; developmental disorder; ss.

30-JUL-2002; 2002EP-00016874.

02-AUG-2001; 2001US-00922181

(AEOM-) AEOMICA INC

Gu Y, Nguyen C; Shannon M,

WPI; 2003-423107/40.

New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. cancer.

Example 8; SEQ ID NO 588; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 6p21.3-22.2, MDZ7 is encoded at chromosome 16p21.2 and MDZ12 is encoded at chromosome 15p21.2 and MDZ12 is encoded at chromosome 25p2 or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross are alerations in MDZ3, MDZ4, MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.

Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Gaps .. 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; tive 0; Mismatches 2; Indels Indels Local Similarity 86.7 es 13; Conservative Query Match Matches

ö

857 CTGGCTCCAGTTGGA 871 16 crescecedacresa 2 pp

ADA99598 standard; DNA; 17 ADA99598; RESULT 774 ADA99598/ 

; 0

Gaps

·;

(first entry) 20-NOV-2003

Human MDZ3 scanning oligonucleotide SEQ ID 587.

Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ3; MDZ4; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.

Homo sapiens.

EP1281758-A2

05-FEB-2003.

30-JUL-2002; 2002EP-00016874.

02-AUG-2001; 2001US-00922181

(AEOM-) AEOMICA INC

Gu Y, Nguyen C; Shannon M,

WPI; 2003-423107/40.

```
The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 6P21.3-22.2, MDZ7 is encoded at chromosome 6P21.3-22.2, Corin manufacturing a medicament for treating or preventing a disorder corin manufacturing a medicament for treating or preventing a disorder corin manufacturing a medicament for treating or preventing a disorder corin manufacturing a medicament for treating or preventing a disorder corin mDZ12, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12 genetic locus. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as
New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                      Example 8; SEQ ID NO 587; 103pp; English.
                                                                                                                                                                                                                           MDZ4, MDZ7 or MDZ12, e.g. cancer.
```

; 0 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; Live 0; Mismatches 2; Indels Sequence 17 BP; 3 A; 6 C; 6 G; 2 T; 0 U; 0 Other; Query Match
Best Local Similarity 86.77
Matches 13; Conservative

ö

Gaps

857 CIGGCICCAGIIGGA 871 17 CTGGCCCCAGCTGGA 3 ð

ADA99600 standard; DNA; 17 BP. ADA99600; ADA99600/

20-NOV-2003 (first entry) 

Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss. Human MDZ3 scanning oligonucleotide SEQ ID 589.

Homo sapiens.

EP1281758-A2.

05-FEB-2003.

02-AUG-2001; 2001US-00922181

30-JUL-2002; 2002EP-00016874.

(AEOM-) AEOMICA INC

Nguyen C; Gn Y, Shannon M,

WPI; 2003-423107/40.

New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, or MDZ12, e.g. cancer

Example 8; SEQ ID NO 589; 103pp; English.

The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is encoded at chromosome 7q22.1, MD24 is encoded at chromosome 7q22.1, MD24 is encoded at chromosome 6p21.3-22.2, MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome comparing a medicament for treating or preventing a thremps, MD24, MD27, and MD212 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD24, MD27, or MD212, The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MD23, MD24, MD27, or MD212 genetic locus. The probes are also be used as probes to detect and characterize gross are also be used as probes to detect and characterize gross are also be used as probes for measuring gene expression. The cuseful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as ö The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic coid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences. Gaps Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss. . 0 Similarity 86.7%; Pred. No. 6.4e+02; 13, Conservative 0; Mismatches 2; Indels Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other; Claim 58; Page 117; 185pp; English. Human H-Ras DNAzyme target #311. ABZ61520 standard; RNA; 17 BP. 29-MAY-2001; 2001US-0294140P. 06-JUN-2001; 2001US-0296249P. 10-SEP-2001; 2001US-0318471P. 29-MAY-2002; 2002WO-US016840. 857 CTGGCTCCAGTTGGA 871 (RIBO-) RIBOZYME PHARM INC. 15 creecceaecreea 1 (first entry) 13; Conservative WPI; 2003-140484/13. WO200297114-A2 Homo sapiens. Mcswiggen J; 21-MAR-2003 05-DEC-2002. ABZ61520; Query Match Best Local S RESULT 776 Matches ABZ61520 \$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac{1}{2}\$\frac \$5555555555555555**X**& g

.; 0

Gaps

```
bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ6524, ABZ66530 - ABZ66585 represent substrate/target sequences for the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      invention relates to a novel short interfering RNA (siRNA) nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                           Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
anti-rheumatic; cancer; AIDS; ss.
                                                                                                              0
                                                                                 4.1%; Score 11.8; DB 1; Length 17; 46.7%; Pred. No. 6.4e+02; tive 6; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 2 A; 11 C; 1 G; 0 T; 3 U; 0 Other;
                                                         Sequence 17 BP; 1 A; 4 C; 6 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                     Human HER2 DNAzyme substrate #869.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 4; Page 149; 185pp; English.
                                                                                                                                                                                                               ABZ65412 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-MAX-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                823 GGCTGTGTCTTTT 837
                                                                                                                                                                                                                                                                                                                                                                                                                             29-MAY-2002; 2002WO-US016840
                                                                                                                                                        GecueGeucecumu 17
                                   ribozymes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ribozymes of the invention
                                                                                                        7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-140484/13.
                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                               WO200297114-A2.
                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                               21-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                      05-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen J;
                                                                                                                                                        m
                                                                                                                                                                                                                                        ABZ65412;
                                                                                  Query Match
                                                                                                                                                                                        RESULT 777
ABZ65412
                                                                                                         Matches
 8X8666
                                                                                                                                                                                                               à
```

```
The invention relates to a novel short interfering RNA (SIRNA) nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic rheumatic acid molecule of the invention has cytostatic, anti-HIV, and anti-HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ65531, ABZ65520 - ABZ66524, ABZ665310 - ABZ66530 - ABZ66531, ABZ66531 , ABZ66531, ABZ665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                        Human, ribozyme, short interfering RNA, siRNA, HER2, K-Ras;
enzymatic nucleic acid, H-Ras; N-Ras, HIV; cytostatic, anti-HIV;
anti-rheumatic; cancer, AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 17; 73.3%; Pred. No. 6.4e+02; Live 2; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 1 A; 6 C; 7 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 58; Page 126; 185pp; English.
                                                                                                                                                                                                                                                                                                                                          Human H-Ras DNAzyme target #777.
        936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-MAY-2002; 2002WO-US016840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACD58975 standard; RNA; 17 BP
                                                      15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            779 GGGCAGCCCCTCTGG 793
                                                                                                                                                                               ABZ61986 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17
                                                                                                                                                                                                                                                                                    21-MAR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ribozymes of the invention
  922 TCACCACCACCTCC
                                              ucaecccaeccuec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 73.3*
...hes 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-140484/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200297114-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-DEC-2002
                                                                                                                                                                                                                                   ABZ61986;
                                                Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACD58975;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 779
                                                                                                                                                       ABZ61986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACD58975
                                                                                                                                                                                                        ð
                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HXXX
```

0;

·;

Gaps

..

4.1%; Score 11.8; DB 1; Length 17; 73.3%; Pred. No. 6.4e+02; ive 2; Mismatches 2; Indels

Query Match
Best Local Similarity 73.3%;
Matches 11; Conservative

```
Claim 1; Page 253; 387pp; English.
                      Draper
```

```
ACD53117
                                    a
ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                      Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
                                                                                                                                                              amberzyme, G-cleaver ribozyme; decoy molecule; aptamer;
amberzyme; G-cleaver ribozyme; brhancer I region; viral replication;
degenerative; disease state; HBV infection; HCV infection; cirrhosis;
liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .,
ц
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J, Morrissey D, Pavco P, Lee
                                                  HCV DNAzyme substrate sequence #1113.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-2001; 2001US-00817879.
08-JUN-2001; 2001US-0087478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-2002; 2002WO-US009187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RIBOZYME PHARM INC
       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Macejak D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-229207/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ROBERTS E.
                                                                                                                                                                                                                                                                                                        Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PAVCO P.
LEE P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DRAPER K.
                                                                                                                                                                                                                                                                                                                                                     WO200281494-A1.
                                                                                                                                                                                                                                                                                                                                                                                                   17-0CT-2002
         24-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Blatt L,
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (DRAP/) (ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (BLAT/)
(MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MORR/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MCSM/)
```

The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HEV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes. BNAzymes, independent acids such as hammerhead ribozymes. BNAzymes, independent acids and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase and/or HBV reverse transcriptase and/or HBV reverse transcriptase and/or the specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV DNA. The nucleic acids may be used to modulate the expression of HBV COMPOUNDS and/or potential therapies disclosed is a method for screening compounds and/or potential therapies disclosed is a method for screening that modulate the expression and/or replication of HCV. The compounds the expression and the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNAzyme or minus strand DNAzyme sequences disclosed in the present invention

Gaps .. 0 4.1%; Score 11.8; DB 1; Length 17; 53.3%; Pred. No. 6.4e+02; tive 5; Mismatches 2; Indels Sequence 17 BP; 2 A; 6 C; 3 G; 0 T; 6 U; 0 Other; Conservative Query Match Best Local Similarity F

; 0

The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and aptamers that bind to HBV reverse renucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well are nucleic acids may be used to modulate the expression of HBV DNA. The nucleic acids may be used to modulate the expression of HBV compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds that modulate the expression and/or replication of HCV. The compounds that methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene

```
Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                 RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; carzyme; decoy molecule; aptamer; g-cleaver ribozyme; decoy molecule; aptamer; molecule; anternscriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                      acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lee P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 164; 387pp; English.
                                                                                                                                    HBV inozyme substrate sequence #737.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                        26-MAR-2001; 2001US-00817879.
08-UUN-2001; 2001US-0087478.
08-UTN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0337055P.
05-DEC-2001; 2001US-0337055P.
                                                                       BP
                                                                                                                                                                                                                                                                                                                      26-MAR-2002; 2002WO-US009187.
894 CITCICAGCITCIGC 908
           CAUCUCAUCUUCUGC 17
                                                                                                                                                                                                                                                                                                                                                                                                       RIBOZYME PHARM INC. BLATT L.
                                                                        ACD53117 standard; RNA; 17
                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ď
                                                                                                                                                                                                                                                                                                                                                                                                                                     MCSWIGGEN J. MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-229207/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LEE P.
DRAPER K.
ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                           MACEJAK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Macejak
                                                                                                                                                                                                                                                        Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAVCO P.
                                                                                                                                                                                                                                                                             WO200281494-A1.
                                                                                                                                                                                                                                                                                                  17-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Blatt L, M
Draper K,
                                                                                                                 24-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         infection
                                                                                             ACD53117;
                                                                                                                                                                                                                                                                                                                                                                                                                 (BLAT/)
(MACE/)
(MCSW/)
(MORR/)
(PAVC/)
                     m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DRAP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-)
                                                    RESULT 780
```

```
·
0
            carcinoma. The present sequence represents a substrate for one of the HBV ribozyme, inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences disclosed in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  for treating cirrhosis, liver failure, ome, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                       Nucleic acid molecule, Hepatitis C virus, HCV, Hepatitis B virus, HBV, RNA stability, RNA expression, RNA synthesis, antisense, enzymatic nucleic acid, hammerhead ribozyme; DNAzyme; inozyme;
                                                                                                                                                                                                                                                                                                                                                        amberzyme; G-cleaver ribozyme; decoy molécule; aptamer;
HBV reverse transcriptase; Enhancer I region; viral replication;
degenerative; disease state; HBV infection; HCV infection; cirrhosis;
liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
virucide; antiinflammatory; substrate; ss.
                                                                                                                Gaps
 expression such as cirrhosis, liver failure, and hepatocellular
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Lee
                                                                                                                ·,
                                                                                     4.1%; Score 11.8; DB 1; Length 17; 65.7%; Pred. No. 6.4e+02; ve 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pavco P,
                                                                                                                                                                                                                                                                                               HCV minus strand DNAzyme substrate sequence #1165.
                                                            Sequence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 295; 387pp; English.
                                                                                                                                                                                                                        ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-MAR-2001, 2001US-00817879.
08-JUN-2001, 2001US-00877478.
08-JUN-2001, 2001US-0296876P.
24-OCT-2001, 2001US-0337055P.
                                                                                                                                   767 CTCCACTTCTGAGGG 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            26-MAR-2002; 2002WO-US009187
                                                                                               66.7%;
                                                                                                                                                          cuccaccucuaages 16
                                                                                                                                                                                                                       ACD63638 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel compound useful for hepatocellular carcinoma,
                                                                                               Local Similarity 66.7
es 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Macejak D,
Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-229207/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DRAPER K.
ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200281494-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LEE P.
                                                                                                                                                                                                                                                                        30-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-OCT-2002.
           carcinoma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ľ,
K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          infection.
                                                                                                                                                                                                                                                 ACD63638;
                                                                                                                                                          N
                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-)
(BLAT/)
(MACE/)
(MCSW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MORR/)
(PAVC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DRAP/)
(ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Draper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Blatt
                                                                                                                                                                                                RESULT 781
                                                                                                           Matches
                                                                                                                                                                                                             ACD63638/
                                                                                                                                                                                                                       8X33333
                                                                                                                                                         a
                                                                                                                                    ₹
```

The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense

```
and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and garamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV BNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies disclosed is a method for screening that modulate the expression and/or replication of HCV. The compounds methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNAZYME or minus strand DNAZYME sequences disclosed in the present
                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lee P;
                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 17; 36.7%; Pred. No. 6.4e+02; Ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pavco P,
                                                                                                                                                                                                                                                                    Sequence 17 BP; 6 A; 2 C; 7 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HCV DNAzyme substrate sequence #205.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                      908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-UUN-2001; 2001US-00877478
08-UUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-2002; 2002WO-US009187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAR-2001; 2001US-00817879.
                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                 CATCICATCITCIGC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACD57171 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                    894 CTTCTCAGCTTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RIBOZYME PHARM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   . υ,
Ε;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Macejak D,
Roberts E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BLATT L.
MACEJAK D.
                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LEE P.
DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200281494-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Blatt L, |
Draper K,
                                                                                                                                                                                                                                      invention
                                                                                                                                                                                                                                                                                                                                                                                                   16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACD57171;
                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (DRAP/)
(ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BLAT/)
(MACE/)
(MCSW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (PAVC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MORR/)
                                                                                                                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACD57171
   $$$$$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ठ
```

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and environmental relationship of the programment of the synthesis, amberzymes, and 9-cleaver ribozymes. Also disclosed inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse compounds and HBV viral replication. Also disclosed is a method for screening compounds and viral replication also disclosed is a method for screening that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV invention.
                                 Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; dibNazyme; inozyme; zinzyme; amberzyme; G-claever ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Match 4.1%; Score 11.8; DB 1; Length 17; Local Similarity 60.0%; Pred. No. 6.4e+02; Local 9; Conservative 4; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 3 A; 6 C; 4 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HBV inozyme substrate sequence #736.
                                                                                                                      Claim 1; Page 237; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAR-2001; 2001US-00817879.
08-UIN-2001; 2001US-00877478.
08-UIN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACD53116 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-MAR-2002; 2002WO-US009187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        765 GCCTCCACTTCTGAG 779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RIBOZYME PHARM INC.
BLATT L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |||:|| |:: :|||
gccuccgcunaugag 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-SEP-2003 (first entry)
WPI; 2003-229207/22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200281494-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACD53116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-)
(BLAT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACD53116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ઠે
```

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or the synthesis, expression and/or stability of Hepatitis C virus (HCV) or and enzymes by a such as hammerhead ribozymes. Blazymes, and enzymes, and enzymes, and enzymes, and goldeaver ribozymes. Also disclosed inozymes, zinzymes, and enzymes that bind to HBV reverse transcriptase primer sequences, as well care nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV cas oligonucleotides may be used to modulate the expression of HBV cas only only and replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene catchom as cirrhosis, liver failure, and hepatocellular carcinoma The present sequence represents a substrate for one of the HBV carcinoma in nozyme, inozyme, d-cleaver, zinzyme, DNAzyme or amberzyme sequences compounds in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acid molecule, Hepatitis C virus, HCV, Hepatitis B virus, HBV, RNA stability, RNA expression, RNA synthesis, antisense, enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; amberzyme; G-cleaver ribozyme, decol molecule; aptamer; antisense transcriptase; Enhancer I region; viral replication; degenerative, disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                              Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                ü
                                                                                                                                                  Lee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 66.7%; Pred. No. 6.4e+02;
Matches 10; Conservative 3; Mismatches 2; Indels
                                                                                                                                                Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                  Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HBV hammerhead ribozyme substrate sequence #664.
                                                                                                                                                                                                                                                                                                                              Example 1; Page 164; 387pp; English.
                                                                                                                                                    Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACD51657 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              767 CTCCACTTCTGAGGG 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3 CUCCACCUCUAAGGG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-SEP-2003 (first entry)
                                                                                                                                                    Macejak D,
Roberts E;
              MCSWIGGEN J. MORRISSEY D.
                                                                                                                                                                                                                WPI; 2003-229207/22
                                                                         LEE P.
DRAPER K.
ROBERTS E.
MACEJAK D.
                                                       PAVCO P.
                                                                                                                                                      Blatt L, N
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACD51657;
                                                                                                                                                                                                                                                                                               infection.
                                                                                           (DRAP/)
(ROBE/)
                                                                           LEEP/)
                                      MORR/)
                                                         PAVC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACD51657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             엄
  ð
```

ö

.. 0

Hepatitis B virus.

WO200281494-A1 17-OCT-2002. SS.

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. DNAzymes, can encleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase and/or HBV reverse transcriptase and/or HBV reverse transcriptase and/or HBV reverse transcriptase and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds that modulate the expression and/or replication of HCV. The compounds compounds of the invention are useful for the treatment of degenerative and disease states related to HBV and HVV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV circhem.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·,
                                                                                                                                                                                                                                                                                                                                                                               Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inozyme, G-cleaver, zinzyme, DNAzyme or amberzyme sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Murine oligonucleotide associated with tumour supression, SEQ ID 596.
                                                                                                                                                                                                                                                                                                          Lee P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 11.8; DB 1; Length 17;
Pred. No. 6.4e+02;
3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                        Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 4 A; 7 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                        Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Page 149; 387pp; English.
                                                                                                                                                                                                                                                                                                        Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     disclosed in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                             08-JUN-2001; 2001US-00877479.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
              26-MAR-2002; 2002WO-US009187
                                              2001US-00817879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCCACTTCTGAGGG 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cuccaccucuaageg 15
                                                                                                                                            RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-JUL-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC63349 standard; DNA;
                                                                                                                                                                                                                                                                                                     Macejak D,
Roberts E;
                                                                                                                                                                                       MCSWIGGEN J. MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-229207/22
                                                                                                                                                           BLATT L.
MACEJAK D.
                                                                                                                                                                                                                                       LEE P.
DRAPER K.
ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                        PAVCO P.
                                           26-MAR-2001;
                                                                                                                                                                                                                                                                                                L,
K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACC63349;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                        (DRAP/)
(ROBE/)
                                                                                                                                                                                                                        (PAVC/)
(LEEP/)
                                                                                                                                                        (BLAT/)
                                                                                                                                                                                       (MCSW/)
                                                                                                                                           RIBO-)
                                                                                                                                                                                                                                                                                                                     Draper
                                                                                                                                                                                                                                                                                                      Blatt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
```

```
The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of gene chip, in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                 New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Murine oligonucleotide associated with tumour supression, SEQ ID 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 4 A; 5 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                               Disclosure, Page 100; 738pp; French.
                                                                                                                                                                                                                       Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                        (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                        17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                       17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              768 TCCACTTCTGAGGGC 782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 rccacrrcraagrec 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC63371 standard, DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                and transfected cells.
                                                                                                                                                                                                                       Amson R,
                                                                                                                                                                                                                                                    WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  schizophrenia; ss.
                                                            WO2003025176-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003025176-A2.
                              Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-2003
                                                                                                                                                                                                                     relerman A,
                                                                                         27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACC63371;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC63371/
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          원
```

```
RESULT 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g
NAME OF THE PROPERTY OF THE PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
```

```
ACC64959;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                    m
                                                                                                                                                             Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                          RESULT 788
                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                               ACC64959
                                                                                                                                                                                                                                                                                                                                                                                                 8888888888
                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                      du
                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                             ACC68866), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying quantifying and/or amplifying nucleic acid, e.g. as one component of gene chip; in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that see characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                     New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Murine oligonucleotide associated with tumour supression, SEQ ID 3769.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying,
                                                                                                                                                                                   invention relates to murine oligonucleotides (ACC62754-
                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 17;
86.7%; Pred. No. 6.4e+02;
iive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Disclosure; Page 471; 738pp; French.
                                                                                                                                                  Disclosure; Page 103; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tuijnder M;
       Tuljnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-SEP-2002; 2002WO-IB004210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             953 GAAGAGCCAAATTGA 967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC66522 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAAGAGCCTAACTGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ĸ,
         Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-333167/31.
                                       WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Telerman A, Amson
                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-MAR-2003.
                                                                                                                                                                                           present
         Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACC66522;
                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus
```

```
.
0
                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          eful for preparation viral diseases that
quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of agene chip, in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases the are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Murine oligonucleotide associated with tumour supression, SEQ ID 2206.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention relates to murine oligonucleotides (ACC62754-
                                                                                                                             are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17; 36.7%; Pred. No. 6.4e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                               Sequence 17 BP; 1 A; 3 C; 3 G; 10 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 3 A; 6 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 288; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              884 GATGCACTTACTTCT 898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               86.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                830 TCTCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rererrierrerer 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACC64959 standard, DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13; Conservative
                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          schizophrenia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
```

```
The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene ohlp; in virus as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                            Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
                                                                                                                                                                                                                              tumour suppression; tumour reversion; apoptosis; virus resistance;
viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                               Murine oligonucleotide associated with tumour supression, SEQ ID 4358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 4 A; 4 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.8; DB 1;
Pred. No. 6.4e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 540; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cooperative oligonucleotide #26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tuijnder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
                                                                                         BP
                                                                                                                                                                                                                                                                                                                                                                                                                                         (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                               17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%;
86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                712 TCCCAGGAGAGTGAC 726
3 rcccaggraaggac 17
                                                                                         17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADA18584 standard; DNA; 17
                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                         ACC67111 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                        schizophrenia; ss
                                                                                                                                                                                                                                                                                                                    WO2003025176-A2.
                                                                                                                                                                                                                                                                                        musculus.
                                                                                                                                                   01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13;
                                                                                                                      ACC67111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADA18584;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 790
                                                                                                                                                                                                                                                                                        Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADA18584
IID ADA1
XX
AC ADA1
XX
XX
DT 20-1
XX
XX
XX
XX
XX
XX
XX
XX
                                                                         RESULT
               셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      р
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
```

0;

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             oligonucleotides have improved sequence specificity for a single-stranded target, reduced toxicity, and improved biological activity as antisense molecules. The present sequence represents a cooperative oligonucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide composition used to, e.g. treat mammal infected by human immunodeficiency virus, comprises synthetic oligonucleotides linked to binding partner consisting of cyclodextrin, adamantane, streptavidin, or
Cooperative oligonucleotide; binding partner; cyclodextrin; adamantane; streptavidin; pharmaceutical composition; nucleic acids expression; HIV; acquired immunodeficiency syndrome; AIDS; anti-HIV; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to an oligonucleotide composition comprising a first and second synthetic cooperative oligonucleotides linked to their respective binding partner consisting of cyclodextrin, adamantane, strepteavidin, or biotin. Each oligonucleotide has a region complementary to a tandem, non-overlapping region of a target nucleic useful as a pharmaceutical composition to inhibit the expression of nucleic acids in vitro, or for treating a mammal infected by HIV or by acquired immunodeficiency syndrome (AIDS). The cooperative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Osteopathic, Gene therapy; High Bone Mass; HBM; LRP5; Zmax1; LRP6; bone mass modulation; osteoporosis; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 0 A; 8 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 6; 29pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADB98966 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LRP5 mutagenic PCR primer #85
                                                                                                                                                                                                                                                                                                                                                                                          95US-00420672.
                                                                                                                                                                                                                                                                                                                             22-JAN-2002; 2002US-00054429.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13-MAY-2002; 2002WO-US014877.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             829 GICTCITITICIC 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Grererectrere 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Agrawal
                                                                                                                                                                                                                                                                                                                                                                                                                                                          (KAND/) KANDIMALLA E
(AGRA/) AGRAWAL S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-606628/57.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   of the invention.
                                                                                                                                                                                                US2003099959-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kandimalla ER,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200292000-A2
                                                                                                                                                                                                                                                                                                                                                                                             12-APR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-DEC-2003
                                                                                                                                                                                                                                                                29-MAY-2003.
                                                                                                                                Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADB98966;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADB98966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\times_{\time
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   셤
```

Mon Jul 12 11:21:14 2004

```
polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                            ·
                                                                                                                                                                                                                       The present invention relates to High Bone Mass (HBM), LRP5 (Zmax1) and LRP6 mutants, which results in a HBM-like phenotype when expressed in a cell. The HBM-like phenotype results in bone mass modulation and/or lipid level modulation. The invention is useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bone mass and/or lipid levels in a subject suffering from e.g. osteoporosis. The present sequence was used to illustrate the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related
                                                                                                                                             New nucleic acid comprising a mutation in LRP5 or LRP6, useful for diagnosing a HBM-like phenotype in a subject and for preparing a composition for modulating bone mass and/or lipid levels in a subject
                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                   Liu W;
                                                                                                                                                                                                                                                                                                                                                             .
                                                                                                    Graham JR, Morales A, Yaworsky PJ,
                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumour suppression/reversion associated nucleotide #1212.
                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                    Disclosure; Page 53; 629pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tuijnder M;
                                                                                                                                                                                suffering from e.g. osteoporosis.
                                                                    (GENO-) GENOME THERAPEUTICS CORP
                                                                                                                                                                                                                                                                                                                                                         .;0
                                                                                                                                                                                                                                                                                                                                                                                                                                                ADB40889/c
ID ADB40889 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2002; 2002WO-IB004219...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-SEP-2001; 2001FR-00011981.
             11-MAY-2001; 2001US-0290071P.
17-MAY-2001; 2001US-029111P.
01-FBB-2002; 2002US-0353058P.
04-MAR-2002; 2002US-0351293P.
                                                                                                                                                                                                                                                                                                                                                                                   768
                                                                                                                                                                                                                                                                                                                                                                                                     15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                  754 AGGGTCCCTAGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                     1 AGGCTCCCCAGGCCT
                                                                                                    Allen K, Anisowicz A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  relerman A, Amscn R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-441574/41.
                                                                                                                          WPI; 2003-129214/12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO2003040369-A2.
                                                                                (AMHP ) WYETH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADB40889;
                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 792
    δ
                                                                                                                                                                                                                                                                                                                                                                                                      g
```

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides. Or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as recombinant models. The nucleotides (also vectors containing them and calls containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of tumours or diseases characterized by development of tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or cell degeneration (e.g. Alzheimer's disease or schizzphrenia). Analysis of the expression of the mucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tumour suppression/reversion associated nucleotide #2330.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 2 A; 1 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 304; 771pp; French.
Disclosure; Page 173; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADB42007 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               925 CCACCACCTCCAGA 939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17 cccccaaccrccaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003040369-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADB42007;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADB42007/
```

0

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive mucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the sequence having at least 80% identity, after optimal alignment, with the uncleotides, as sequence that hybridizes under stringent conditions with the nucleotides. The nucleotides are used as probes or primers for detecting, and identifying, quantifying and/or amplifying nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transagenic animals, as crecembinant polypeptides, and to prepare transagenic animals, as caperimental models. The nucleotides (also vectors containing the wectors), the encoded polypeptides and antibodies of viral infections or diseases characterized by development of tumours or viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and on prepare and polypeptides can be used for prepared the containing the vectors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   used to screen for their specific interactive molecules
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ve 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 10 A; 1 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       832 TCTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17 rerrrecrierrea 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003040369-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      potentially
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADB42034;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           also be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADB42034
```

0

Gaps

0;

Tumour suppression/reversion associated nucleotide #2357. ADB42034 standard; DNA; 17 BP. 17-SEP-2002; 2002WO-IB004219 (first entry) CCCXX SX X B X B X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;

17-SEP-2001; 2001FR-00011981

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M; relerman A, Amson R,

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 307; 771pp; French.

The invention relates to the isolation of 6127 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a

sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the conditions with the nucleotides or the nucleotides or primers for detecting, can antisense sequences, of nucleotides or primers for detecting, can antisense sequences, of nucleotides involved in tumour complication, apoptosis and or viral resistance, to produce experimental models. The nucleotides (also vectors containing them and capture or containing the vectors), the encoded polypeptides and antibodies (calls containing the vectors), the encoded polypeptides and antibodies (calls containing the vectors), the encoded polypeptides and antibodies or viral infections or diseases characterized by development of tumours or call degeneration (e.g. Alzheimer's disease or schizophrenia).

Co reall degeneration (e.g. Alzheimer's disease or schizophrenia).

Co and/or prognosis of these diseases. The nucleotides and polypeptides can also be useful for treating diseases associated with abnormal ö cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies. Gaps .; 0 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; rive 0; Mismatches 2; Indels Tumour suppression/reversion associated nucleotide #3904. Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other; Disclosure; Page 488; 771pp; French. Σ Tuijnder (MOLE-) MOLECULAR ENGINES LAB. ADB43581 standard; DNA; 17 BP. expression of the nucleotides. 17-SEP-2001; 2001FR-00011981. L7-SEP-2002; 2002WO-IB004219. 896 TCTCAGCTTCTGCGA 910 17 (first entry) 13; Conservative 3 TCTCGGCTTCTGTGA Telerman A, Amson R, (revised) WPI; 2003-441574/41. Best Local Similarity WO2003040369-A2. Homo sapiens. 15-MAY-2003. 18-DEC-2003 04-DEC-2003 diagnosis. ADB43581; Query Match RESULT 795 Matches ADB43581 ò g

nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and calls containing the vectors), the encoded polypeptides and antibodies of viral infections or diseases characterized by development of tumours of viral infections or diseases characterized by development of tumours or call degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides and polypeptides can do/or prognosis of these diseases. The nucleotides and polypeptides can be used to screen for their specific interactive molecules, expression of the nucleotides,

Sequence 17 BP; 4 A; 3 C; 5 G; 5 T; 0 U; 0 Other;

Length 17; 2; Indels 4.1%; Score 11.8; DB 1; 86.7%; Pred. No. 6.4e+02; live 0; Mismatches 2; 768 TCCACTTCTGAGGGC 782 Best Local Similarity 86.7 Matches 13; Conservative Query Match 8 dd

·.

Gaps

.,

3 rccaarrrrdageec 17

ADB41984 standard; DNA; 17 BP ADB41984; RESULT 796 ADB41984/c 

(first entry) (revised) 18-DEC-2003 04-DEC-2003

Tumour suppression/reversion associated nucleotide #2307.

cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; diagnosis.

Homo sapiens.

WO2003040369-A2.

15-MAY-2003.

17-SEP-2002; 2002WO-IB004219.

17-SEP-2001; 2001FR-00011981.

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M; Telerman A, Amson R,

WPI; 2003-441574/41.

New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.

Disclosure; Page 301; 771pp; French.

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides, not nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour

```
;
0
                    recombinant polypeptides, and to prepare transgenic animals, as ceptramental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies of viral infections or diseases characterized by development of tumours of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
          resistance, to produce
                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 10 A; 2 C; 4 G; 1 T; 0 U; 0 Other;
suppression or reversion, apoptosis and or viral
                                                                                                                                                                                                                                                                    expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             832 TCTTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17 rcrrrrrrrrcrrch 3
                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 86.7
1es 13; Conservative
                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                             Matches
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
```

gene therapy; antibody therapy; modulator of GAPN; GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss. Human GAP_N DNA 17-mer oligo #9. ADD20777 standard; DNA; 17 BP. (first entry) WO2003033703-A2. Homo sapiens. 15-JAN-2004 ADD20777; RESULT 797 ADD20777/

11-OCT-2002; 2002WO-US032597. 15-OCT-2001; 2001US-0330323P. 24-APR-2003. KARXBERNER KREEN BENER B

(AMSH ) AMERSHAM BIOSCIENCES SV CORP. Zhang J;

WPI; 2003-403224/38.

Novel human GTP-activator protein for Rab-like GTPase and polynucleotide encoding the protein, useful for diagnosing, treating or preventing disorders associated with increased expression or activity of the protein,

Example 2; SEQ ID NO 33; 149pp; English.

The invention relates to an isolated human GTP-activator protein for Rablike GTPase (GAPN) polypeptide (I), a sequence having 65% identity to (I), a sequence in which at least 95% of deviations from (I) are conservative substitutions, or a fragment of at least 8 contiguous amino acids of (I). The polypeptide is useful for identifying a specific binding partner for itself, by contacting the polypeptide in vivo to a potential binding partner and determining if the polypeptide in vivo to a potential binding partner and determining if the polypeptide binding partner binds to the polypeptide. (I) and a nucleic acid encoding the polypeptide (II) are useful for diagnosing or monitoring a disease caused by altered expression of GAPN, by determining the level of expression of GAPN in a sample of nucleic acids or proteins that derives from a subject expression providing diagnostic and/or monitoring information. (I), (II)

```
or agonist of (I) is useful for treating or preventing a disorder associated with decreased expression or activity of GAPN, and an antagonist of (I) is useful for treating or preventing a disorder associated with increased expression or activity of GAPN (all claimed).

(I) is useful as immunogen to raise antibodies that specifically recognize GAPN proteins. (II) is useful to drive in vivo expression of GAPN proteins, and as hybridization probes to detect, characterize and quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both genomic and transcript-derived nucleic acid samples. This sequence represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 1 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
```

```
.
0
4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; Live 0; Mismatches 2; Indels
                                                                  704 CCAGCGAGTCCCAGG 718
                                                                                                   15 ccadcedercccaag 1
              Local Similarity 86.7
les 13; Conservative
Query Match
                  Best Loc
Matches
                                                                  8
```

ADD20775 standard; DNA; 17 BP (first entry) 15-JAN-2004 ADD20775; RESULT 798 ADD20775, 

Human GAP_N DNA 17-mer oligo #7

gene therapy; antibody therapy; modulator of GAPN; GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.

Homo sapiens.

WO2003033703-A2

24-APR-2003.

11-OCT-2002; 2002WO-US032597

15-OCT-2001; 2001US-0330323P

(AMSH ) AMERSHAM BIOSCIENCES SV CORP.

Zhang J;

WPI; 2003-403224/38.

Novel human GTP-activator protein for Rab-like GTPase and polynucleotide encoding the protein, useful for diagnosing, treating or preventing disorders associated with increased expression or activity of the protein.

Example 2; SEQ ID NO 31; 149pp; English.

The invention relates to an isolated human GTP-activator protein for Rablike GTPase (GAPN) polypeptide (I), a sequence having 65% identity to (I), a sequence in which at least 95% of deviations from (I) are conservative substitutions, or a fragment of at least 8 contiguous amino acids of (I). The polypeptide is useful for identifying a specific acids of (I). The polypeptide is useful for identifying a specific binding partner for itself, by contacting the polypeptide in vivo to a potential binding partner and determining if the polypeptide binding partner binds to the polypeptide. (I) and a nucleic acid encoding the partner binds to the polypeptide. (I) and a nucleic acid encoding the COLypeptide (II) are useful for diagnosing or monitoring a disease caused by altered expression of GAPN, by determining the level of expression of GAPN in a sample of nucleic acids or proteins that derives from a subject expression providing diagnostic and/or monitoring information. (I), (II) car agonist of (I) is useful for treating or preventing a disorder associated with decreased expression or activity of GAPN, and an

```
antagonist of (I) is useful for treating or preventing a disorder associated with increased expression or activity of GAPN (all claimed).

(I) is useful as immunogen to raise antibodies that specifically recognize GAPN proteins. (II) is useful to drive in vivo expression of GAPN proteins, and as hybridization probes to detect, characterize and quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both genomic and transcript-derived nucleic acids smaples. This sequence represents a 17-mer oligonucleotide spanning the GAP_N DNA sequence.
      88888888888888
```

Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

```
Gaps
                                    0
 4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; trive 0; Mismatches 2; Indels
                               13; Conservative
                  Best Local Similarity
Query Match
                               Matches
```

ò

704 CCAGCGAGTCCCAGG 718 ccagcggrcccaag 3 17 셤 à

0

Gaps

Human GAP_N DNA 17-mer oligo #8. ADD20776 standard; DNA; 17 BP 15-JAN-2004 (first entry) ADD20776; ADD20776/c

gene therapy; antibody therapy; modulator of GAPN; GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.

WO2003033703-A2. Homo sapiens. 24-APR-2003

15-OCT-2001; 2001US-0330323P. 11-OCT-2002; 2002WO-US032597

(AMSH ) AMERSHAM BIOSCIENCES SV CORP.

Zhang J;

WPI; 2003-403224/38.

Novel human GTP-activator protein for Rab-like GTPase and polynucleotide encoding the protein, useful for diagnosing, treating or preventing disorders associated with increased expression or activity of the protein.

Example 2; SEQ ID NO 32; 149pp; English.

The invention relates to an isolated human GTP-activator protein for Rablike GTPase (GAPN) polypeptide (1), a sequence having 65% identity to (1), a sequence in which at least 95% of deviations from (1) are conservative substitutions, or a fragment of at least 8 contiguous amino acids of (1). The polypeptide is useful for identifying a specific conservative substitutions, or a fragment of at least 8 contiguous amino acids of (1). The polypeptide is useful for identifying a specific binding partner for itself, by contacting the polypeptide in vivo to a potential binding partner and determining if the polypeptide binding partner binds to the polypeptide. (1) and a nucleic acid encoding the polypeptide (II) are useful for diagnosing or monitoring a disease caused CAPN in a sample of nucleic acids or proteins that derives from a subject Suppected to have the disease, alterations from a normal level of CAPN in a sample of nucleic and/or monitoring information. (1), (II) or asponist of (I) is useful for treating or preventing a disorder associated with increased expression or activity of GAPN (all claimed). 

ö

Gaps

;

2; Indels

Score 11.8; DB 1; Pred. No. 6.4e+02; 0; Mismatches 2;

4.18; 86.78;

Query Match Best Local Similarity

898 TCAGCTTCTGCGATC 912

ð g

15

13; Conservative

Matches

Length 17;

ð q

```
The invention describes an isolated or recombinant polypeptide (I)

comprising a sequence: (a) comprising 1 of 30 sequences (S1), as given in

the specification, or a conservative variant; (b) encoded by 1 of 30

sequences (S2), as given in the specification, or a conservative variant;

(c) encoded by a sequence that hybridises under stringent conditions to

S2; and (d) encoded by a sequence 70 % identical to S2. The expression or

activity of (I) is modulated to modulate a plant growth trait in a

flowering plant, of the family Brassicaceae, preferably in a plant that

is Arabidopsis, Brassica, Zaa, Oryza, Triticum, Hordeum, Lolium, Sorghum,

Clycopersicon, Capsicum, Gosspium, Havea, Linnum, Prunus, Citrus, Populus,

Pinus, or Quercus. A new method is used to detect genes for a plant

growth trait. This sequence represents a polynucleotide isolated from the
                                                                                                                                                                                                                         .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated or recombinant polypeptide for use in modulating a plant growth trait in a flowering plant e.g. in Arabidopsis, Brassica, Zea, or
(I) is useful as immunogen to raise antibodies that specifically recognize GAPN proteins. (II) is useful to drive in vivo expression of GAPN proteins, and as hybridization probes to detect, characterize and quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both genomic and transcript-derived nucleic acid samples. This sequence represents a 17-mer oligonucleotide spanning the GAP. NDNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              plant growth; plant growth trait modulation; Brassicaceae; Arabidopsis; Brassica; Zea; Oryza; Triticum; Hordeum; Lolium; Sorghum; Glycine; Medicago; Helianthus; Lactuca; Beta; Vitis; Solanum; Lycopersicon; Capsicum; Gossypium; Hevea; Linum; Prunus; Citrus; Populus; Pinus;
                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                         .
0
                                                                                                                                                                                 Length 17;
                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 6.4e+02;
.ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Plant growth associated polynucleotide seg id 147.
                                                                                                                                           Sequence 17 BP; 2 Å; 6 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; SEQ ID NO 147; 81pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Buckler ES;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            THERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                          ADE25172 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-JAN-2003; 2003US-00338777.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-JAN-2002; 2002US-0347288P
                                                                                                                                                                                                                                                                     718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Haudenschild CD,
                                                                                                                                                                                                                                                                                                        ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                  704 CCAGCGAGTCCCAGG
                                                                                                                                                                                                                                                                                                            16 CCAGCGGGTCCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-803305/75.
                                                                                                                                                                                                          Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003188343-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Magnoliophyta.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (LYNX-) LYNX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Quercus; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-OCT-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bowen BA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADE25172;
                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                       RESULT 800
                                                                                                                                                                                                                                                                                                                                                                                              ADE25172,
```

ss; primer; PCR; human; Human Leukocyte Antigen; HLA; genotype.

HLA class I allele specific primer #38.

(first entry)

29-JAN-2004

ADE13422;

BP.

ADE13422 standard; DNA; 17

RESULT 801

```
ó:
                                                                                                                                                                                                                                                                                                                                    The invention relates to a method of identifying a class I or II Human Leukocyte Antigen (HLA) genotype of a subject using hybridisation and amplification assay. The method is used for determining the HLA genotype of a subject. The present sequence represents a HLA class I allele
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SB188 for elongation mediated multiplexed analysis of HLA-B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   probe; ss; human; CFTR; human leukocyte antigen; HLA; genetic testing; carrier screening; genotyping; profiling; polymorphic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                               Identifying class I or II Human Leukocyte Antigen genotypes using hybridization and amplification assays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1;
36.7%; Pred. No. 6.4e+02;
ve. 0: Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 3 A; 6 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                     Claim 7; SEQ ID NO 38; 66pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 705 CAGCGAGTCCCAGGA 719
                                                                                                                                                                                99US-0172768P.
                                                                                                                                                                                            20-DEC-2000; 2000US-00747391.
                                                                                                                                                          25-APR-2002; 2002US-00133779
                                                                                                                                                                                                                                                                                                                                                                                                                                              ilarity 86.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGCGAGTCCGAGGA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADE77637 standard; DNA; 17
                                                                                                                                                                                                                                                             WPI; 2003-874916/81.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
ses 13; Conserv
                                                                                                                                                                                                                                         Tonai R;
                                                                                                                                                                                                                    (STEM-) STEMCYTE
                                                                                                                                                                                                                                                                                                                                                                                         specific primer
                                                                                                              US2003165884-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human probe
                                                                                         Homo sapiens
                                                                                                                                                                                 20-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JAN-2004
                                                                                                                                     04-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADE77637;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ~
                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                         Chow R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            802
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         q
```

Sequence 17 BP; 7 A; 4 C; 5 G; 1 T; 0 U; 0 Other;

probe or genetic marker.

orimer,

disease; cholesterol homeostasis; ss;

obesity; athersclerosis; diabetes mellitus;

coronary artery heart d differntial expression.

US2003180764-A1

25-SEP-2003

Homo sapiens

```
Concurrent interrogation of a number of polymorphic sites, useful for genetic testing, carrier screening, genetic profiling, and identity testing, comprises conducting a multiplexed elongation assay using
 multiplexed elongation assay; enzymatic recognition; cystic fibrosis conductance transmembrane regulator.
          conductance transmembrane regulator.
                                                                                                                                                                                                                                                            Example 9; Page 48; 143pp; English
                                                                                                                                                             (BIOA-) BIOARRAY SOLUTIONS LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                        15-OCT-2001; 2001US-0329427P.
15-OCT-2001; 2001US-0329438P.
15-OCT-2001; 2001US-0329619P.
15-OCT-2001; 2001US-0329620P.
14-MAR-2002; 2002US-0364416P.
                                                                                        15-OCT-2002; 2002WO-US033012.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGCGAGTCCCAGGA 719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGCGAGTCCGAGGA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                WPI; 2003-393553/37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                               Hashmi G,
                                                     WO2003034029-A2.
                                      Homo sapiens.
                                                                       24-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13;
                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                               Li AX,
                                                                                                                                                                                                                                             probes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADE30854
ID ADE:
XX
AC ADE:
XX
DT 29-;
XX
DE Chol
DE Chol
KW expu
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
```

Polynucleotides differentially regulated in response to cholesterol and adipogenesis are useful to detect and treat associated conditions such as obesity, athersclerosis, diabetes mellitus and coronary artery heart

(LYNX-) LYNX THERAPEUTICS INC

Bowen B;

Shang J,

WPI; 2003-830986/77.

08-JAN-2003; 2003US-00339793 09-JAN-2002; 2002US-0347286P Claim 8; SEQ ID NO 241; 59pp; English.

disease

```
The invention describes a composition comprising at least one expression vector comprising a polynucleotide of the invention. The composition has anorectic, antiarteriosclerotic, cardiant and antidiabetic properties. The invention is used to detect and treat conditions associated with elevated cholesterol and lipid or during adipogenesis, particularly obesity, athersclerosis, diabetes mellitus or coronary artery heart disease. This sequence represents a polynucleotide differentially
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE30691;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADE30691/c
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               This invention relates to a novel method for the concurrent interrogation of a number of polymorphic sites in the presence of, and without interference from, non-designated polymorphic sites. Specifically, it comprises conducting a multiplexed elongation assay by applying one or more temperature cycles to achieve linear amplification of the target or controlled conditions. Furthermore, this detection method uses probe extension or elongation and relies on enzymatic recognition, a superior controlled conditions. Furthermore, this detection method uses probe extension or elongation and relies on enzymatic recognition, a superior controlled conditions furthermore probes and methods useful for identifying or detecting polymorphisms at one or more designated sites, such that they can identify mutations within the cystic fibrosis conductance can identify mutations within the cystic fibrosis conductance transmembrane regulator (CFTR) or the human leukocyte antigen (HIA) genes. In addition, concurrent interrogation of a multiplicity of polymorphic sites is useful for genetic testing, carrier screening, genotyping or genetic profilling, and identity testing. This oligonucleotide is a human probe used for the elongation mediated

""" and "Liplexed analysis of HIA-B," in an exemplification of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 3 A; 6 C; 7 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADE30854 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADE30854;
```

expression vector; anorectic; antiarteriosclerotic; cardiant; antidiabetic; elevated cholesterol; elevated lipid; adipogenesis;

Cholesterol homeostasis/adipogenesis related DNA seq id 241.

```
Gaps
                                                                                                                                                                                                                                                                                                                               expression vector; anorectic; antiarteriosclerotic; cardiant; antidiabetic; elevated cholesterol; elevated lipid; adipogenesis; obsisty; athersclerosis; diabetes mellitus; coronary artery heart disease; cholesterol homeostasis; ss; differntial expression.
                                                                                            0;
                                                         4.1%; Score 11.8; DB 1; Length 17; 86.7%; Pred. No. 6.4e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                   Cholesterol homeostasis/adipogenesis related DNA seg id 78.
expressed during cholesterol homeostasis and adipogenesis.
                             Sequence 17 BP; 6 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                 ADE30691 standard; DNA; 17 BP
                                                                                                                712 TCCCAGGAGAGTGAC 726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-JAN-2002; 2002US-0347286P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JAN-2003; 2003US-00339793.
                                                                       86.7%;
                                                                                                                                           3 rcccaecacaarcac 17
                                                                                                                                                                                                                                                                          (first entry)
                                               Query Match
Best Local Similarity 86.7'
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003180764-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                        29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-SEP-2003
```

ò

AAQ22247-Q22283

```
This oligomer contains methylphosphonate linkages except for positions 1, 7 and 16 which are phosphate diester bonds. The oligomer is complementary to the area around the polyA signal of the HSV-1 ULB gene. ULB is one of the essential beta-genes and the protein it encodes forms a complex with two other proteins which functions as a primase and helicase. The oligomer can interfere with expression and function of the gene. See
                                                                                        Polynucleotides differentially regulated in response to cholesterol and adipogenesis are useful to detect and treat associated conditions such as obesity, athersclerosis, diabetes mellitus and coronary artery heart
                                                                                                                                                                                                       The invention describes a composition comprising at least one expression vector comprising a polymucleotide of the invention. The composition has anorectic, antiarteriosclerotic, cardiant and antidiabetic properties. The invention is used to detect and treat conditions associated with elevated cholesterol and lipid or during adipogenesis, particularly obesity, athersclerosis, diabetes mellitus or coronary artery heart disease. This sequence represents a polymucleotide differentially expressed during cholesterol homeostasis and adipogenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Methylphosphonate oligomer #0022 complementary to HSV-1 polyA signal.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Herpes Simplex Virus; type 1; beta-gene; ULB; primase; helicase; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New oligomers complementary to viral genome(s) or mRNA transcripts areanti-sense agents which interfere with viral replication of e.g. Herpes simplex virus, Epstein-Barr virus etc.
                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 4 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 6.4e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                  claim 8; SEQ ID NO 78; 59pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 20; 33pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAQ22270 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90US-00568501.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     90US-00568501
(LYNX-) LYNX THERAPEUTICS INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         898 TCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15 readcereredare 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Maxwell KW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1992-096516/12.
                                                                 WPI; 2003-830986/77.
                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (GENT-) GENTA INC.
                                 Bowen B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-AUG-1990;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-MAR-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO9203051-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ22270;
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                   Shang J,
                                                                                                                                                      disease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  805
                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                               3est
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ90920 and AAQ90921 are a primer pair for the 2nd stage amplification of the hMLH1 (a MutL homologue) gene exon 14. A mutation in an analogous segment of a hWLH1 or hPMS1 nucleic acid isolated from a subject, can be detected by comparing it with the above gene fragment. This method can be used to diagnose cancer susceptibility, or to identify and classify a DNA
                                                                        ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Determn. of a mutation in a muth homologue or gene prod. in a tissue used to diagnose cancer susceptibility, and to identify and classify DNA mismatch-repair-defective tumour.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                          Gaps
                                                                                                                                                                                                                                                                                                                hMLH1; MutL homologue; cancer diagnosis; mismatch repair; tumour; susceptibility; mutation detection; exon 14; primer N-19456; second stage amplification; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                          .
0
                                                                                                                                                                                                                                                                                     hMLH1 gene exon 14 second stage amplification primer N-19456.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Liskay RM;
                                           4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 1 A; 4 C; 5 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Baker SM, Bollag RJ, Kolodner RD, Bronner CE,
                 Sequence 18 BP; 2 A; 5 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                      /*tag= a
/note= "biotinylated"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Fig 4B-3; 168pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYOR-) UNIV OREGON HEALTH SCI.
(DAND ) DANA FARBER CANCER INST INC.
                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mismatch-repair defective tumour
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                93US-00168877.
94US-00209521.
94US-00352902.
                                                                                                                                                                                                        AAQ90920 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              969 TCTCTAAATCTGGTG 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94WO-US014746.
                                                                                                         797 CAAGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                  (first entry)
                                                                                Conservative
                                                                                                                                    18 CAAGAGGGCTCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1995-231583/30
                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9516793-A1
                                                                                                                                                                                                                                                                  05-MAR-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-JUN-1995
                                                                              13;
                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                         AAQ90920;
                                                                                                                                                                                  RESULT 806
                                                                                 Matches
                                                                                                                                                                                                AAQ90920
                                                                                                                                                                                                               ò
S X S
```

0

Gaps

.,

Length 17; 2; Indels 3 réreragriciégie 17

<u>유</u>

```
AAT16428 standard; DNA; 18 BP
   AAT16428;
RESULT 807
 AAT16428
```

(first entry) 13-SEP-1996

Primer #1 for sWSS2367 human obesity gene.

Obesity; mouse; OBP; leptin; hormone; body weight regulation; diabetes; food intake; energy expenditure; high blood pressure; cholesterol; human; gene therapy; antibody; cancer; Kobe beef; Foie gras; immunoassay; PCR; primer; amplify; polymerase chain reaction; ss.

Synthetic.

GB2292382-A.

21-FEB-1996.

95GB-00016947. 17-AUG-1995; 94US-00292345. 94US-00347563. 95US-00438431. 95US-00483211. 17-AUG-1994; 30-NOV-1994; 10-MAY-1995; 07-JUN-1995;

(UYRQ ) UNIV ROCKEFELLER

Gajiwala K; Zhang Y, Proenca R, Maffei M, Halaas JL, Friedman JM, Burley SK;

WPI; 1996-099009/11.

Obesity polypeptide(s) able to modulate body wt. - useful for e.g. reducing wt. in treatment of diabetes, high blood pressure and high reducing wt. in treatment of diabetes cholesterol and for cosmetic reasons.

Example 10; Page 142; 304pp; English.

AAT16392-T16429 represent amplification primers for the human obesity to amplify the OBP gene sequence (see AAT16373). These sequences were used to amplify the OBP gene sequence from the YAC contig containing the human OBP gene, in a series of sequence tagged-site (STS)-specific PCR assays.

There were 19 5TSS found within the YAC contig human OBP gene sequence. This sequence was used in conjuncture with AAT16429 to amplify the STS wSS2367. OBP has effects on both food intake and energy expenditure. OBP and its analogues are useful for modifying body weight (optionally combined with known medicaments), for treating diabetes, high blood pressure or high cholesterol. The OBP coding sequence (and sequences complimentary to it) can be used in gene therapy for modifying body weight. The protein can be used for reducing weight for health or cosmetic reasons in obese humans, or to produce leaner food animals. Antagonists of OBP (including antibodies) are useful for increasing body weight, e.g. for treating weight loss associated with cancer, or for cosmetic reasons in humans, or for production of Kobe beef or Foie gras in domestic animals. Of DBP antibodies (ABP) can also be used in diagnostic immunoassays for the presence of OBP. The formation of Ab-OBP complexes enables in vitro evaluation of levels of OBP in a sample, especially to detect diseases associated with elevated or decreased levels, and to monitor treatment of these diseases

Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

Gaps 0; 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels Similarity 86.7%; 13; Conservative Query Match Best Local Similarity Matches

· 0

TCCTGGCTTCATTTG 18

AAT50753 standard; RNA; 18

AAT50753;

07-MAR-1997 (first entry)

Rabbit CETP hairpin ribozyme target sequence #1825.

neutral lipid transfer; plasma lipoprotein; arherosclerosis; atherectomy, reverse cholesterol transport; high density lipoprotein; therapy; CETP; familial hypercholesterolaemia; dystlpidaemia; hypolphalipoproteinemia; peripheral vascular disease; hyperbetalipoproteinaemia; RCT; inhibitor; angioplastic restenosis; low density lipoprotein; diabetes; HDL; rabbit; Hairpin ribozyme; cholesterol ester transfer protein; mRNA cleavage;

Oryctolagus cuniculus.

WO9620279-A1.

04-JUL-1996.

95WO-US016000. 11-DEC-1995;

(RIBO-) RIBOZYME PHARM INC (WARN ) WARNER LAMBERT CO. Couture L, Stinchcomb D, Mcswiggen J, Bisgaier C,

WPI; 1996-321852/32.

New ribozyme(s) for cleaving cholesterol ester transfer protein mRNA useful for preventing or treating initial development, progression or regression of vascular diseases, esp. familial hypercholesterolaemia.

Claim 4; Page 57; 72pp; English.

AAT50699-T50754 represent target sequences for the rabbit cholesterol ester transfer protein (CETP) hairpin ribozymes (see AAT50643-T50698).

CETP is a 74 KD glycoprotein that facilitates neutral lipid transfer between plasma lipoproteins. The numbering of the targets refers to the between plasma lipoproteins. The numbering of the targets refers to the position of the cleavage site in full length CETP. The ribozyme then complete to cleave mRNA from the gene encoding CETP, thereby thousand or expression of the mRNA. By inhibiting CETP, thereby blocking synthesis and/or expression of the mRNA. By inhibiting CETP, the cell minated) thereby preventing the reduction in size density of the high concreasing HDL levels. The ribozymes can be used to treat conditions associated with abnormal levels of CETP, specifically atherosoclerosis, peripheral vascular disease, hyperbetalipoproteinaemia, dyslipidaemia, complications of diabetes, transplant, atherosoclerosis, familial hypercholesterolaemia, hypoalphalipoproteinaemia, vascular complications of diabetes, transplant, atherosoclopy and angioplastic restenosis. By inhibiting CETP, the levels of HDL and low density createnosis. By inhibiting CETP, the receiver and angioplastic decrease in LDL), and the HDL:LDL ratio are favourably altered (a chicasse in LDL) levels, and a corresponding increase in LDL levels). The ribozymes can also be used diagnostically to study genetic drift and mutations in diseased cells, and to detect CETP mRNA. As the ribozymes target specific regions of the CETP gene, they have low non-specific activity 

Sequence 18 BP; 0 A; 6 C; 4 G; 0 T; 8 U; 0 Other;

Gaps .. 0 4.1%; Score 11.8; DB 1; Length 18; 40.0%; Pred. No. 6.8e+02; Live 7; Mismatches 2; Indels Conservative Query Match Best Local Similarity

. 0

855 TCCTGGCTCCAGTIG 869

AAX70309;

e

ð g RESULT 809 AAX70309

```
The present sequence is the sense oligonucleotide -20 for the human WSX receptor can be used to identify and purify ligands and activators. An anti-WSX receptor antibody can be used as an agonist constructe the WSX receptor, leading to enhanced proliferation or differentiation of a cell expressing the WSX receptor. It can also be differentiation of a cell expressing the WSX receptor. It can also be considered to decrease body weight and/or fat-depot weight and/or food intake in a obses mammal. WSX receptor ligands can be used to enhance proliferation or differentiation of lymphoid, myeloid or erythroid blood proliferation or differentiation of lymphoid, myeloid or erythroid blood cell lineages. This is useful when a mammal, especially a human, is sufferentiation therapy or bone marrow transplantation therapy. Consucted by sufferentiation therapy or bone marrow transplantation therapy. The products of the used to repopulate blood cells in a mammal. The products can also be used to treat, e.g. neoplastic disorders, arteriosclerosis, Type II diabetes, polycystic ovarian disease, cardiovascular diseases, consistence, hypercholesterolaemia, hypertriglyceridaemia, cancer and consistence in the product of the consistence in the consist
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WSX receptor and related antibodies and ligands - used to develop products for diagnosis and therapy, e.g. for improving haematopoiesis or
                                                                                                                                 antibody; agonist; proliferation; obesity; differentiation; anaemia; treatment; neoplasia; arteriosclerosis; Type II diabetes; bolycystic ovarian disease; cardiovascular disease; osteoarthritis; dermatological disorder; hypertension; insulin resistance; hypercholesterolaemia; hypertriglyceridaemia; cancer; cholelithiasis;
                                                                                                           WSX receptor; identification; purification; ligand; activator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; Live 0; Mismatches 2; Indels
                                                               Sense oligonucleotide -20 for human WSX receptor cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 7 A; 4 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Kim KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chiang NY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 8; Fig 7; 219pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT85604 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96US-00585005.
96US-00667197.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97WO-US000325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     834 ITTTCTTCTGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13; Conservative
                   17-MAR-1998 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Carter PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for treating tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-372864/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cholelithiasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rodrigues ML;
                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                      WO9725425-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-JAN-1996;
20-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-JUL-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bennett B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT85604;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11
                                                                                                                                                                                                                                                                                          sense; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAT85604
EXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fims-like tyrosine kinase 1 (fl-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                         Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like; tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 18; 56.7%; Pred. No. 6.8e+02; ve 3; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                             Human flt1 VEGF receptor hairpin ribozyme substrate #77.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Escopedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 18 BP; 3 A; 5 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 4; Page 95; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAT85603 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    861 CTCCAGTTGGAACAC 875
                                                                                                                                                                                                                        AAX70309 standard; RNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96WO-US017480.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            95US-0005974P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       66.78;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cuccaduuddeacuc 17
                                           822 TGGCTGTGTCTCTTT 836
                                                                                          17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                 28-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10; Conservative
                                                                    Pavco P, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAY-1997.
```

Matthews W;

; 0

Gaps

0;

AAT85603;

RESULT 810 AAT85603/c ID AAT856( XX AC AAT856(

Matches

ŏ g Human eosinophil major basic protein antisense oligonucleotide.

Asthma; airway epithelium; adenosine free; cystic fibrosis; chronic obstructive pulmonary disease; bronchitis; ss.

```
The present sequence is the antisense oligonucleotide -20 for the human WSX receptor cDNA. The receptor can be used to identify and purify ligands and activators. An anti-WSX receptor antibody can be used as an agonist to activate the WSX receptor, leading to enhanced proliferation of a cell expressing the WSX receptor. It can also be used to decrease body weight and/or fat-depot weight and/or food intake in an obese mammal. WSX receptor ligands can be used to enhance proliferation or differentiation of lymphoid, myeloid or erythroid blood cell inneages. This is useful when a mammal, especially a human, is suffering from decreased blood cell levels, i.e. anaemia, caused by chemotherapy, radiation therapy of the analso be used to repopulate blood cells in a mammal. The products can also be used to treat, e.g. neoplastic disorders, arteriosclerosis, Type II diabetes, polycystic ovarian disease, cardiovascular diseases, officiality, dermatological disorders, hypertansion, insulin can entity in the constant of the can also be used to repopulate blood cells in a mammal. The products of the constant of the can also be used to treat, e.g. neoplastic disorders, arteriosclerosis, Type II diabetes, polycystic ovarian disease, cardiovascular diseases, createriation, insulin the call of the ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          receptor and related antibodies and ligands - used to develop incts for diagnosis and therapy, e.g. for improving haematopoiesis or
                                                                                                                                 antibody; agonist; proliferation; obesity; differentiation; anaemia; treatment; neoplasia; arteriosclerosis; Type II diabetes; polycystic ovarian disease; cardiovascular disease; osteoarthritis; dermatological disorder; hypertension; insulin resistance; hypercholesterolaemia; hypertriglyceridaemia; cancer; cholelithiasis;
                                                                                                       Human; WSX receptor; identification; purification; ligand; activator;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels
                                                   Antisense oligonucleotide -20 for human WSX receptor cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matthews W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 BP; 4 A; 3 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Kim KJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chiang NY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 8; Fig 7; 219pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97WO-US000325.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96US-00585005.
96US-00667197.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 834 TTTTCTTCTCTGAAG 848
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Carter PJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (GETH ) GENENTECH INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for treating tumours.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-372864/34.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cholelithiasis
                                                                                                                                                                                                                                                                        antisense; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bennett B, Ca
Rodrigues ML;
                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                 WO9725425-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-JUN-1996;
17-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-JUL-1997
                                                                                                                                                                                                                                                                                                                              Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WSX
```

A method for treating airway disease in a subject has been produced, which involves the topical administration of an essentially adenosine free antisense oligonucleotide (ON) to the airway epithelium of the subject. The present sequence is an antisense oligonucleotide specific for the human cosinophil major basic protein. The method can be used to treat airway diseases such as cystic fibrosis, asthma, chronic obstructive pulmonary disease, bronchitis and other airway diseases characterised by an inflammatory response. By eliminating adenosine from the antisense ON, its liberation upon antisense degradation is prevented, thereby preventing adenosine- induced bronchoconstriction in patients

with hyper-reactive airways

Treatment of airway diseases such as asthma - by topically applying adenosine-free antisense oligo:nucleotide to airway epithelium of

95US-00474497. 96WO-US009306

07-JUN-1995;

06-JUN-1996;

19-DEC-1996.

WO9640162-A1

Synthetic

(UYEC-) UNIV EAST CAROLINA.

Metzger WJ;

Nyce JW,

WPI; 1997-051871/05.

Example 5; Page 27; 71pp; English.

```
Gaps
                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                          p53; antisense oligonucleotide; modulate; gene expression; ss.
                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                    Sequence 18 BP; 0 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                p53 gene antisense oligonucleotide p53-T-28.
                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                97EP-00101531.
                                                                                                                                                                                                                                                                     949 GCAAGAAGAGCCAAA 963
                                                                                                                                                                                                                                                                                                                                                                                                                           97EP-00101531
                                                                                                                                                                                                                                                                                16 GCAACAAGAGCGAAA 2
                                                                                                                                                                                                                                                                                                             AAV48563 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                              Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                           31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                    15-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                        EP856579-A1
                                                                                                                                                                                                                                                                                                                                                                                                    05-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                         AAV48563;
                                                                                                                                                                                                                                                                                                  RESULT 813
ਨੋ
                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                              o'
```

Gaps

.; 0

AAT76130 standard; DNA; 18 BP

RESULT 812

AAT76130,

(first entry)

12-SEP-1997

AAT76130;

TGTACTTCTCTGAAG 16

· 0

```
PTP04; PTP05; PTP10; SAD; ALP; ALK-7; protein tyrosine phosphatase; type I receptor serine/threonine kinase; cancer; leukaemia; lymphoma; neurodegenerative disease; neuronal survival; Alzheimer's disease; Parkinson's disease; Parkinson's disease; Parkinson's disease; Huntington's disease; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                       WO9849317-A2
                                                                                                                                                                                                                                                                                                                                                                                              27-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                         28-APR-1997;
                                                                                                                                                                                                                                                                                                                                                                                                              20-MAY-1997;
                                                                                                                                                                                                                                                                                                                                                                                   05-NOV-1998
                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                        AAV81761;
                                                             culture.
                                                                                                                                                                                                                                                                  RESULT 814
                                                                                                                                                                                                                                                                         AAV81761/c
                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                   à
                                                                                                                                                                                                                                                 Dβ
```

97US-0044428P. 97US-0047222P. 97US-0049477P.

98WO-US008439

```
97US-0049914P.
97US-0063595P.
97US-0049756P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV64091 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-JAN-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 86.7
Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           775 CTGAGGGCAGCCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18 creardecadecrer
                                                                                                                                                         Courtneidge SA, App H,
                                                                                                                                    clary D,
                                                                                                                                                                                                 WPI; 1999-009434/01
                                                                                        (SUGE-) SUGEN INC.
                    18-JUN-1997;
23-OCT-1997;
                                                                                                                                    Plowman GD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV64091;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAV64091/c
    à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     q
                                                                                                                                                                                                                                                                                                                               AAV48485-564 represent antisense oligonucleotides directed against the p53 gene. Of these, only oligonucleotides AAV48485-517 resulted in effective downregulation of negative growth by p53 and increased cell proliferation, while AAV4858-64 had little effect. The oligonucleotides exemplify the invention. The specification describes oligonucleotides chat contain B-30 mucleotides, which contain at most B nucleotides that can each form three hydrogen bonds to cytosine; do not contain four consecutive nucleotides able to form three H-bonds each to four consecutive cytosines; do not contain two sequences of three consecutive nucleotides and the ratio between residues able to form two H-bonds each (2R) or three such bonds (3R) is given by 2R/3R = 0.33-0.72. The coligonucleotides are used to modulate expression of genes, particularly the genes for p53, ErbB-2, juns, jund, TGF-beta I or beta 2 to control proliferation of primary cell cultures (e.g. bone marrow stem, liver or kidney cells, osteoclasts, osteoblasts and/or keratinocytes). The coligonucleotides can also be used to analyse function of proteins (by altering their expression or activity) and therapeutically, e.g. in cases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                       Preparation of antisense oligo:nucleotide(s) which lack long runs of consecutive guanosine or inosine – and have specific ratio of residues able to form two or three hydrogen bonds, have greater activity and reduced toxicity, used therapeutically or to modulate growth of cells in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               of cancer or (targeting TGF) for stimulating the immune system
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 11.8; DB 1; Length 18; Pred. No. 6.8e+02; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 3 A; 6 C; 7 G; 2 T; 0 U; 0 Other;
                         (BIOG-) BIOGNOSTIK GES BIOMOLEKULARE DIAGNOSTIK.
                                                                                                                                                                                                                                                                                                Example 2; Fig 4b; 286pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAV81761 standard; DNA; 18 BP.
                                                                          Brysch W;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            776 TGAGGGCAGCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 regececkécecric 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human SAD RACE primer 5848.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-MAR-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                      WPI; 1998-400910/35
                                                                        Schlingensiepen K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
```

```
The present invention describes isolated, enriched or purified nucleic acids encoding PTP04, SAD, PTP05, PTP10, ALP and ALK-7 proteins. The above proteins, other than ALK-7, are protein tyrosine phospharases.

(C above proteins, other than ALK-7, are protein tyrosine phospharases.

(I.e. agonists and antagonists, including NBP) in vivo or in vitro. These substances are used to treat or prevent diseases associated with abnormal signal transduction pathways that involve the proteins, particularly cancer (e.g. leukaemia and lymphoma), while modulators of ALK-7 (which is cancer (e.g. leukaemia and lymphoma), while modulators of ALK-7 (which is cancer (e.g. leukaemia and special and Alzheimer's, Parkinson's or Huntington's diseases. Nucleic acid fragments of the polynucleotides cancoding the proteins can be used as probes to identify and clone related sequences; to detect protein-encoded RNA; to generate transgenic animals and in gene therapy (optionally after mutation). Ab are used to determine the proteins. The present sequence represents a RACE primer for human SAD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ó
                                                                                                                     New mucleic acid encoding specific protein tyrosine phosphatases - useful for identifying specific modulators for treatment and prevention of cancer and neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chlamydia trachomatis; ltuB gene; tSDA; primer; amplification; thermophilic strand displacement assay; detection; diagnosis; trachoma; inclusion conjunctivitis; infant pneumonitis; urethritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
Markby D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chlamydia trachomatis ltuB gene amplification primer ltuB-6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
  Onrust S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 4 A; 4 C; 7 G; 3 T; 0 U; 0 Other;
  Peles E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                   Example 6; Page 86; 193pp; English.
Jallal B,
, Hui TH;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BECT ) BECTON DICKINSON & CO.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-00963933.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
Chlamydia trachomatis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-NOV-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US5837469-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Harris JM;
```

```
Identifying compounds which modulate expression of nucleic acids, provide compounds having defined physical, chemical or bioactive
                                                                                                                                                                                                                                                                                                                                          properties, e.g. antisense activity
                                                                                                                                                                                                                                                                                             (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                       Baker BF,
     WPI; 1999-023441/02
                                                                                                                                                                                                                                                                                                            Wyatt JR,
                                                                                                                                                                                                                                                                                                                      WPI; 1999-620446/53
                                                                                                                                                                                      26-JAN-2000
                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                              13-APR-1998;
28-APR-1998;
                                                                                                                                                                                                                                                 WO9953101-A1
                                                                                                                                                                                                                                                                     13-APR-1999;
                                                                                                                                                                                                                                                           21-OCT-1999
                                                                                                                                                                                                                                                                                                       Cowsert LM,
                                                                                                                                                                                                                                  Synthetic
                                                                                                                                          16
                                                                                                             Query Match
                                                                                                                                                                             AAZ41003;
                                                                                                                                                                                                                                                                                                            Ohasi C,
                                                                                                                                                         816
                                                                                                                      Matches
                                                                                                                                                        RESULT 81
AAZ41003/
à
```

```
·,
                                                                                                                                                                                              The present sequence represents a nucleic acid primer used in amplifying the Chlamydia trachomatis ltuB gone. The nucleic acid is used for the detection of Chlamydia trachomatis by nucleic acid amplification, especially by thermophilic strand displacement amplification. The detection of Chlamydia trachomatis is used to diagnose trachoma, inclusion conjunctivitis, infant pneumonitis, urethritis and lymphogranuloma venereum, which are all caused by the microbe. The product obtained is the C. trachomatis ltuB gene, which is responsible for production of specific mRNA transcripts produced in the infectious
Chlamydia trachomatis derived primers and probes - used for the specific detection of the microbe with nucleic acid amplification and strand displacement reactions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human RhoC phosphorothioate antisense oligonucleotide SEQ ID NO:155.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Identification; genetic target; gene modulation; human; probe; antisense oligonucleotide; phosphorothicate; PCR primer; nucleotide sequence-based technology; antisense drug discovery; target validation; sa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 5 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                     Claim 7; Col 17; 12pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US008268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0081483P
98US-00067638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAZ41003 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TACAGAGATGCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     878 TCCTGAGATGCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                stage of the microbe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
```

```
compounds with the tNA sequence. The method comprises generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual compounds with the tNA according to defined criteria. Also described are: (1) a method of defining a set of oligonucleotides (ONS) that modulate the expression of a tNA sequence via binding of the ONS with the tNA sequence comprising generating a library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual ONS with cc criteria, and evaluating in silico the binding of the virtual ONS with a compounds that modulate the expression of a method of defining a set of the tompounds with the tNA. The methods can be used for the generation of synthetic compounds having defined physical, chemical or bioactive properties. Information gathered from assays of such compounds is used to identify nucleic acid sequences that are antisense drug discovery and target validation. AAZ40852 to AAZ41220, and AAX52701 to AAX52701 to AAX52701 to Expresent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Identifying compounds which modulate expression of nucleic acids, used to provide compounds having defined physical, chemical or bloactive
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A method has been developed of defining a set of compounds that modulate the expression of a target nucleic acid (tNA) sequence via binding of the compounds with the tNA sequence. The method comprises generating a
                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>B</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human CD40 phosphorothioate antisense oligonucleotide SEQ ID NO:74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Brooks
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Identification; genetic target; gene modulation; human; probe; antisense oligonucleotide; phosphorothioate; PCR primer; nucleotide sequence-based technology; antisense drug discovery; target validation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                         Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.88+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sasmor HM,
                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Freier SM,
Vickers TA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               properties, e.g. antisense activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 8; Page 78; 264pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Baker BF, Mcneil J,
tt JR, Borchers AH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 744 GTAGGGTCCCAGGGT 758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US008268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-0081483P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-00067638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ40925 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTAGGGACCCAGAGT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LM, bar.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1999-620446/53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9953101-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cowsert LA
Ohasi C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ40925;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ40925,
     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
```

Ç

used

Brooks DG;

Sasmor HM,

Freier SM, Vickers TA;

', Mcneil J, Borchers AH,

A method has been developed of defining a set of compounds that modulate the expression of a target nucleic acid (tNA) sequence via binding of the

Example 18; Page 97; 264pp; English.

library of virtual compounds in silico according to defined criteria, and evaluating in silico the binding of the virtual compounds with the tNA according to defined criteria. Also described are: (1) a method of defining a set of oligonucleotides (ONS) that modulate the expression of a tNA sequence via binding of the ONS with the tNA sequence comprising criteria, and evaluating in silico the binding of the virtual ONS with the tNA according to defined criteria; and (2) a method of defining a set the tNA according to defined criteria; and (2) a method of defining a set of compounds with the tNA. The methods can be used for the generation of the compounds with the tNA. The methods can be used for the generation can didentification of synthetic compounds having defined physical, chemical or bloactive properties. Information gathered from assays of such compounds is used to identify nucleotic acid sequences that are tractable to a variety of nucleotide sequence-based technologies, e.g. antisense drug discovery and target validation. AAZ40852 to AAZ41220, and AAZ50001 to AAX52706, represent sequences used in the exemplification of

Sequence 18 BP; 5 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

```
.,
4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; tive 0; Mismatches 2; Indels
                                                                   851 AGCGTCCTGGCTCCA 865
                                                                                          ATCTTCCTGGCTCCA 1
                                       13; Conservative
                   Best_Local Similarity
Matches 13; Conserv
      Query Match
                                                                        à
```

0

Gaps

AAZ31800 standard; DNA; 18 (first entry) 24-JAN-2000 AAZ31800; 818 AAZ31800,

В

BP.

G-alpha-13; human; inhibitor; cancer; antisense compound; therapy; ss. Human G-alpha-13 antisense inhibitor ISIS# 20749. Synthetic. 

Homo sapiens. US5981732-A. 09-NOV-1999

98US-00205860. 98US-00205860. 04-DEC-1998; 04-DEC-1998;

(ISIS-) ISIS PHARM INC

Cowsert LM;

WPI; 1999-633376/54.

Antisense compound inhibiting expression of human G-alpha-13.

Claim 11; Col 38; 38pp; English.

This sequence represents an antisense inhibitor of the invention, and inhibits the expression of the human G-alpha-13 protein. The antisense compounds of the invention are of 8 to 30 nucleobases in length, that inhibits the expression of the human G-alpha-13. The antisense compound is useful for treating an animal, particularly humans, having or being prone to a disease or condition associated with the expression of G-alpha-13, such as Camer

Sequence 18 BP; 2 A; 5 C; 5 G; 6 T; 0 U; 0 Other;

```
Query Match
```

```
4.1%; Score 11.8; DB 1; Length 18;
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present sequence represents a sensory neurone specific 2a (SNS-2a) antisense oligonucleotide. SNS-2a is a sodium channel protein. SNS-2a can be used in a method for the identification of a modulator of a sodium channel, and for assaying for compounds which modulate sodium flux. The sodium channel modulators can be used in a medicament for the treatment
          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mammalian sodium channel protein for treating pain and hypersensitivity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
             Gaps
                                                                                                                                                                                                                             Sensory neurone specific 2a; SNS-2a; sodium channel protein; pain; voltage gated; hypersensitivity; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasoconstriction; inflammation; allergic rhinitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 18; ilarity 86.7%; Pred. No. 6.8e+02; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                         Sensory neurone specific 2a antisense oligonucleotide #1.
             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human major basic protein antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 BP; 3 A; 8 C; 1 G; 6 T; 0 U; 0 Other;
Pred. No. 6.8e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 6; Page 24; 73pp; English.
                                                                                                                                 AAZ25006 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                    99WO-GB000838.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tate SN;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          801 AGCICICCICCAACT 815
                                                                                                                                                                                                                                                                                                                                                                                              98GB-00005793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACCTCTCCTCCATCT 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of pain or hypersensitivity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX54529 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                     (first entry)
                                        707 GCGAGTCCCAGGAGA
                                                                  17 GCAAGTCCAAGGAGA
                13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                        (GLAX ) GLAXO GROUP LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Hick CA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1999-562112/47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
es 13; Conserv
  Best Local Similarity
                                                                                                                                                                                                                                                                                                                   WO9947670-A1.
                                                                                                                                                                                                                                                                                                                                                                      18-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                               18-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUL-1999
                                                                                                                                                                                     03-DEC-1999
                                                                                                                                                                                                                                                                                                                                            23-SEP-1999.
                                                                                                                                                                                                                                                                                           Rattus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Grose DT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX54529;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 820
                                                                                                          RESULT 819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    임
                                                                    셤
```

```
respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                   New antisense oligonucleotides used in treatment of, e.g. pulmonary
asthma; allergy; asthma; impeded respiration;
                                                                                                                                                                                                                                                               Disclosure; Page 65; 120pp; English.
                                                                                                                                                 97US-0059160P.
98US-00093972.
                                                                                                                                98WO-US019419
                                                                                                                                                                             (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       as all types of
                                                                                                                                                                                                                  WPI; 1999-229400/19
                                                     prostate cancer; ss
                                                                                                                                                                                                                                               vasoconstriction
                                                                                                                                                 17-SEP-1997;
09-JUN-1998;
                                                                                                                                17-SEP-1998;
                                                                                           W09913886-A1
                                                                                                             25-MAR-1999.
                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                               Nyce JW;
acute
```

The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonuclectides may be derived from sequences AXX5222-74. These multiple target oligonuclectides (specifically AAX55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, respiratory cute asthma, allergies, asthma, impeded respiration, respiratory pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphonas, carcinomas e.g. noma, kidney cancer, melanoma, hepatic metastases, as cancers which may metastasize or have metastasized including breast and prostate cancer Sequence 18 BP; 0 A; 6 C; 4 G; 8 T; 0 U; 0 Other; hepatocellular carcinoma, kidney

```
;
0
4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02;
                         2; Indels
                         0; Mismatches
                                                  949 GCAAGAAGAGCCAAA 963
                         13; Conservative
                                                                    GCAACAAGAGCGAAA
            Local Similarity
                                                                         16
                         Matches
                                                  ð
                                                                        В
```

ö

Gaps

Human major basic protein antisense oligonucleotide. AAX54389 standard; DNA; 18 BP. (first entry) 05-JUL-1999 AAX54389; AAX54389/c 

Antisense oligonucleotide; multiple target; antisense treatment;

acute asthma; allergy; asthm; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasoconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis; pulmonary vasoconstriction; inflammation; allergic rhinitis; .mpaired respiration; inflammation; lung disease; prostate cancer; ss.

Synthetic.

WO9913886-A1

25-MAR-1999

98WO-US019419. 17-SEP-1998;

98US-00093972. 97US-0059160P 17-SEP-1997; 09-JUN-1998;

(UYEC-) UNIV EAST CAROLINA.

Nyce JW;

WPI; 1999-229400/19

New antisense oligonucleotides used in treatment of, e.g. pulmonary

Disclosure; Page 63; 120pp; English.

The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonucleotides may be derived from sequences AAX55272-74. These multiple target oligonucleotides (specifically AAX55180-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis, acute asthma, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, upulmonary vasconstriction, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, pancreatic cancer, hepetocellular carcinoma, kidney cancer, melanoma, hepatic metastases, a well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer as all types of 

Sequence 18 BP; 0 A; 6 C; 4 G; 8 T; 0 U; 0 Other;

Gaps ., 4.1%; Score 11.8; DB 1; Length 18; larity 86.7%; Pred. No. 6.8e+02; Conservative 0; Mismatches 2; Indels Local Similarity es 13; Conserv Query Match Best Loca Matches

ö

g

AAZ20833 standard; DNA; 18 AAZ20833; BXHXGXB

RESULT 822 AAZ20833/c

BP

Nucleotide sequence of control motif from IL-2 promoter (-160). (first entry) 03-DEC-1999

```
This is the nucleotide sequence used as a control for an investigation into the possible role of Inducible cAMP Early Repressor (ICER) in Fas 19and gene expression. ICER may be involved in downregulating the activity of a wide variety of genes involved in downregulating the immune response. In particular, ICER binds to a number of recognition sites present in the promoters of genes encoding cytokines critical to the immune response. The agent which decreases the level of ICER expression can be used in the preparation of a medicament for increasing the activity of an immune cell. This is useful for the treatment of an individual suffering from a condition which reduces immune cell activity. Such conditions include cancer and infection with a pathogenic organism. There is a need for therapeutic strategies which prevent or reduce downregulation of the host immune response such as outlined in this invention. For example, cancer cells may induce the production of prostaglandin E 2 (FGE 2) in neighbouring normal host cells such as macrophages. PGE 2 inhibits the proliferation of Teals, therefore a reducing the ability of the host immune system to destroy the cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               primer used to amplify exons and introns of human marenostrin DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New agents for the blockade of inducible cAMP early repressor (ICER)-mediated inhibition of immune cell activity.
                         immune regulation; cytokine expression; cAMP; DNA binding domain; 3',5' - cyclic adenosine monophosphate; autorepressor; promoter; ds; infection; cancer; Fas ligand.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; Live 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    familial Mediterranean fever; FMF;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 BP; 9 A; 2 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 26; Fig 23; 113pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Weng DE,
                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US000967.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0076293P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 965 TGACTCTCTAAATCT 979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX26566 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACTCTCTGAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cohen PA, Bodor J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1999-540592/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human marenostrin;
                                                                                                                                                                                                                                                                             WO9943814-A1.
                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                        15-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-FEB-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14-JUN-1999
                                                                                                                                                                                                                                                                                                                                                   02-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX26566;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX26566,
SON COURSE SERVICE SER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ДD
```

Czerniecki BJ,

Koski GK,

```
New isolated ZTMPO-1 polypeptides used for diagnosis and treatment of e.g. cancer, cardiac and autoimmune disorders and infectious diseases and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nuclear membrane protein, cardiac disorder; autoimmune disorder; testis; infectious disease; cellular proliferation; skeletal muscle; thyroid; adrenal gland; tumor; spermatogensis; sperm activation; PCR primer;
                                                                                                                                                                                                                                        PCR primers AAX26565-66 were used to amplify introns and exons of cDNA encoding human marenostrin. The mutated form of the protein is responsible for familial Mediterranean fever (FMP). Detection of mutations in the marenostrin gene is useful for the diagnosis or treatment of FMF, especially associated with mutations in the last exon
                                                                                                                                                                    useful for detecting mutations responsible for
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Soluble protein; ZTMPO-1; thymopoietin-emerin family; human; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       contraception; immune response; humoral response; vaccination; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human soluble protein ZTMPO-1 specific antisense primer ZC15486.
                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Grossmann
                                                                                                              Touitou I;
                                                                                                                                                                                                                                                                                                                                                                       DB 1; Length 18;
                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 6.8e+02;
tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Maurer MF,
                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 5 A; 5 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                              Weissenbach J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Farrah TM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 3; Page 98; 110pp; English.
                                                                                                                                                                                                                Disclosure; Page 23; 58pp; French.
                                                                                                              Heilig R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          e.g. cancer, cardiac and autor for developing contraceptives.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ24775 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US008601.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-00063838.
                          98WO-FR001805
                                                     97FR-00010487
                                                                                                                                                                                                                                                                                                                                                                                                                                873 CACTITCCTGAGATG 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                           4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conklin DC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                         18 cccrreccreacard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ZYMO ) ZYMOGENETICS INC.
                                                                                                                                                                                                                                                                                                                 of the marenostrin gene
                                                                                                                                                                      Human marenostrin gene
familial Mediterranean
                                                                                                              Clepet C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 1999-634003/54.
                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                  (GENE-) GENETHON II.
                                                                                                                                        WPI; 1999-190150/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                     19-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO9954468-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sheppard PO,
                          13-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        31-JAN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                21-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-OCT-1999.
25-FEB-1999
                                                                                                              Bernot A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ24775;
                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 824
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88
                                                                                                                                                                                                                                                           Bodorova J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
```

PCR primer;

WO9909059-A1

BP.

.,

;

```
The invention provides a human soluble protein ZTMPO-1 which has homology to the thymopoletin-emerin family of nuclear membrane proteins. The ZTMPO to the thymopoletin-emerin family of nuclear membrane proteins. The ZTMPO levels of ZTMPO-1 receptor polypeptides may be indicative of pathological levels of ZTMPO-1 receptor polypeptides may be indicative of pathological conditions including cancer, cardiac and autoimmune disorders and infectious diseases. The nucleic acid can be used as source of hybridization probes for detecting a genetic abnormality in a patient. The ZTMPO-1 polypeptides can be used to modulate cellular proliferation and differentiation in a diverse array of tissues such as testis, skeletal muscle, thyroid and adrenal gland. Antagonists of ZTMPO-1 can be used in modulating cellular proliferation and differentiation such as in tumor growth and development. They can also be used for inhibiting to spermatogensis and sperm activation. Such ZTMPO-1 antagonists can be used for contraception in humans and animals, and in particular, domestic and efettilization of an egg. ZTMPO-1 antagonists could also be used to mediate immune response, e.g. by boosting the humoral response in individuals at risk for an infectious disease or as a supplement to grown and all manner and animal and primer specific for the grown and animal and primer specific for the grown and animal and animal and animal animals.
                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 1; Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 6.8e+02;
iive 0; Mismatches 2.
                                                                                                                                                                                                                                                                                                                                                                 ZTMPO-1 DNA, used in mapping of the gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA33833 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 cercerrecreeaer 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-JUL-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best_Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                853 CGTCCTGGCTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200009525-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA33833;
                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAA33833/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ò
```

0

Gaps

. 0

```
Human; adenosine receptor; low adenosine antisense oligonucleotide;
Low adenosine antisense oligonucleotide SEQ ID NO:1522.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-FEB-2000.
```

```
WPI; 2000-205971/18.
phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                      New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                                                                                              99WO-US017712
                                                                                                                                                                                                                                                                                            98US-0095212P
                                                                                                                                                                                                                                                                                                                          (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-205971/18.
                                                                                                                                                                                                                                                              03-AUG-1999;
                                                                                                                                                                                                                                                                                             03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                           Nyce JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cancers
```

```
The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets uncleid acids involved in bronchoconstriction, alleagues, and/or inflammation. The ON can have antiinflammatiory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are impaired airways, including lung disease associated with inflammation, cimpaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating ce.g. ischaemic conditions, pulmonary vasconstriction, alleagues, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive fibrosis, pulmonary hypertension, emphysema, chronic obstructive carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the carcinomas, and effects. The A-containing ONS break down with the correspond to SEQ ID NO:1 to 185, but the sequences differ invention, which correspond to SEQ ID NO:1 to 185, but the sequences differ cinvention, which correspond to SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:1 to 1885, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequence differ from the previously named sequences. SEQ ID NO:1 to 180 (AAA32332 to AAA33992) are specifically claimed ONS from the present invention do not match lighting the their corresponding SEQ ID NO: sequences given in the sequence given in the sequence given in the disclosure of the present invention do not match lighting the sequences given in the sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Low adenosine antisense oligonucleotide SEQ ID NO:1662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 BP; 0 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
Claim 18; Page 454; 1343pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA33973 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-US017712.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0095212P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    949 GCAAGAAGAGCCAAA 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-JUL-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 86.7
hes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16 GCAACAAGAGCGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200009525-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24-FEB-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA33973;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nyce JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA33973/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

```
The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets conclete acids involved in bronchoconstriction, allergies, and/or conclete acids involved in bronchoconstriction, allergies, and/or conclete acids involved in analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects affilict the lungs of a subject. They can be used for treating confitients, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive carcinomas, and cancers which any meteastasise to the lungs, including breast and prostate cancer. The A-containing ONS break down with the carcinomas, and and cancers which activates adenosine content of the ONS reduces side effects. The A-containing ONS break down with the correspond to SEQ ID NO:1 to 2815, and then the last 185 containing which correspond to SEQ ID NO:1 to 2815, and then the last 185 containing which correspond to SEQ ID NO:1 to 2815, and then the last invention, which correspond to SEQ ID NO:1 to 186; but the sequences differ from the previously named sequences. SEQ ID NO:1 to 1869 (AAA32932 to AAA33992) are specifically claimed ONS from the present invention. N.B. Sequences given in the disclosure of the present invention. N.B. Sequences given in the disclosure of the present invention of the sequences. SEQ ID NO:11 to 1869 do not match match contains the present invention in the sequences. SEQ ID NO:11 to 1869 do not match contains the present invention of the present invention in the sequence.
                          New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                                                                                                                                                                            Claim 18; Page 471; 1343pp; English.
```

4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels Sequence 18 BP; 0 A; 6 C; 4 G; 8 T; 0 U; 0 Other; 0 949 GCAAGAAGAGCCAAA 963 Local Similarity 86.7 nes 13; Conservative Query Match Matches à

16 GCAACAAGAGCGAAA

a

02-MAR-2000 AAZ47758; RESULT 827 AAZ47758,

Human CD40 antisense oligonucleotide SEQ ID NO:74. AAZ47758 standard; DNA; 18 BP. (first entry) 

anticancer; immuno-suppressive; anti-psoriaritic; allograft rejection; hyperproliferative disease; autoimmune disease; rheumatoid arthritis; inflammatory bowel disease; asthma; psoriasis; cancer; tumour; ss. Human; CD40; antisense oligonucleotide; phosphorothioate; modulation; expression; immunomodulatory; anti-inflammatory disease; immunomodulatory; anti-inflammatory; anti-arthritic; anti-asthmatic; antiproliferative;

Homo sapiens Synthetic.

11-NOV-1999.

99WO-US008765 22-APR-1999; 98US-00071433 01-MAY-1998;

(ISIS-) ISIS PHARM INC.

Cowsert LM; Bennett CF,

WPI; 2000-062158/05

Antisense molecules directed against nucleic acid encoding human CD40, for treating e.g. immune, inflammatory or hyperproliferative diseases.

Claim 3; Page 45; 102pp; English.

expression of human CD40. CD40 is involved in lymphocyte activation, the expression of human CD40. CD40 is involved in lymphocyte activation, prowned and/or angiogenesis. Inhibition of CD40 is used to treat or prevent immune-associated diseases (specifically quest vs. host disease, allograft rejection or autoimmune diseases); inflammation (specifically disease or psoriasis) or hyperproliferation (specifically another or program or hyperproliferation (specifically cancer and tumnours). the antisense oligonucleotides are also useful as diagnostic and research reagents. AAZ47769 represents the human CD40 nucleotide sequence. AAZ47770 to AAZ47772 represent human CD40 forward and reverse PCR primers, and a human CD40 PCR probe, respectively. AAZ47773 to AAZ47775 represent other PCR primers and a probe used in the exemplification of the present invention AAZ47685 to AAZ47768 represent phosphorothicate antisense 

Sequence 18 BP; 5 A; 3 C; 7 G; 3 T; 0 U; 0 Other;

Gaps 0 4.1%; Score 11.8; DB 1; Length 18; 16.7%; Pred. No. 6.8e+02; ve. 0; Mismatches 2; Indels 86.78; Query Match
Best Local Similarity 86.7
Matches 13; Conservative Matches

;

à a

with their corresponding SEQ ID NO: sequences given in the sequence

AAC62623 standard; DNA; 18 BP. (first entry) 01-FEB-2001 AAC62623; RESULT 828 AAC62623

.. 0

Gaps

.; 0

Human; mouse; OB gene; obesity; adiposity; body weight; PCR primer; ss. Human OB gene sequence tagged-site-specific PCR primer #37. 95US-00488208 Homo sapiens 07-JUN-1995; US6124448-A. 26-SEP-2000. 

Zhang Y, Friedman JM; (UYRQ ) UNIV ROCKEFELLER Maffei M, Proenca R,

WPI; 2000-601556/57.

94US-00392345. 94US-00347563. 95US-00438431.

17-AUG-1994; 30-NOV-1994; 10-MAY-1995; Nucleic acid primers and probes useful for detecting mutations in mammalian OB gene associated with regulation of body weight and adiposity.

Example 10; Col 81-82; 153pp; English

0

```
relating to the control of body weight of animals including humans. Worleic acids of at least 10 nucleotides which are hybridisable to a noncoding region of an OB nucleic acid have been created. The OB gene plays a critical role in the regulation of body weight and adiposity. The nucleic acids may be used as probes or as primers for PCR. They are useful for evaluating the presence of mutations in the human OB gene or for evaluating the level of expression of OB mRNA. Defects associated with OB gene expression result in obese phenotypes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                inflammation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes antisense compounds of about 8-30 mucleotides in length targeted to the 5' UTR (untranslated region), 3' UTR or coding region of the nucleic acid encoding human Akt-2, which inhibits the expression of human AKT-2. Human Akt-2 as a member of the antiinflammatory, cytostatic and antiifectious activities, and can be used in gene therapy. They are useful in inhibiting the expression of human Akt-2 by contacting the cells or the tissues in vitro. They can also be used for adaptosis and treatment of infection, inflammation and tumour formation, and for prophylaxis. The present sequence represents a human Akt-2 phosphorothioate antisense oligonucleotide used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human; Akt-2; antisense oligonucleotide; phosphorothioate; inhibition; serine/threonine kinase; antiinflammatory; cytostatic; antiifectious; gene therapy; infection; inflammation; tumour; ss.
                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human Akt-2 phosphorothioate antisense oligonucleotide SEQ ID NO:37.
sequence is a PCR primer which was used in an invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense compound for diagnosis and treatment of infection, infla
and tumor formation is targeted towards the nucleic acid encoding
member of serine/threonine family of kinases.
                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                             Score 11.8; DB 1; Length 18;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 a
"phosphorothioate linkages"
                                                                                                                                                                            Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 3; Col 38; 30pp; English
                                                                                                                                                                                                                                                                                                                                                                                                              ВЪ.
                                                                                                                                                                                                               4.1%;
86.7%;
                                                                                                                                                                                                                                                                                   869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-00256465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-00256465
                                                                                                                                                                                                                                                                                                                    rccrecrrcarric 18
                                                                                                                                                                                                                                                                                                                                                                                                            AAA08484 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                   TCCTGGCTCCAGTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1. .18
/*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-270345/23.
                                                                                                                                                                                                                              Local Similarity
ses 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-FEB-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
   present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US6043090-A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-MAR-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Monia BP,
                                                                                                                                                                                                                                                                                   855
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA08484;
                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ношо
                                                                                                                                                                                                                                                                                                                                                                                        22222222222222
                                                                                                                                                                                                                                                                                   à
```

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ7440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the development of pharmaceutical differential efficacious responses to and side effects from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            treatment.
                                                                                                                                                                                                                                                                                                                                                                                                     Human biallelic marker upstream amplification primer SEQ ID NO:5889.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Human genome, biallelic marker; high density disequilibrium map; genomic map; haplotype; phenotype; polymorphic base; gentotyping; haplotyping; hybridisation; identification; characterisation; amplification; single nucleotide polymorphism; SNP; PCR primer; amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                  ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                         4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         pharmaceutical agents acting on a disease as well as other
N.B. The SEQ ID NOs 2852, 2913, 2974, 3035, 3096, 3157, 322
                                       Sequence 18 BP; 4 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 1 A; 3 C; 5 G; 9 T; 0 U; 0 Other;
exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 8; Page 1486; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Chumakov I;
                                                                                                                                                                                                                                                                                        BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0082614P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-IB000822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0109732P
                                                                                                                                                        837 TCTTCTCTGAAGACA 851
                                                                                                                                                                                     TCCTCTGTGAAGACA 16
                                                                                                                                                                                                                                                                                        AAZ71533 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                  13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-013267/01
                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diagnosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                 10-SEP-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-OCT-1999
                                                                                                                                                                                                                                                                                                                            AAZ71533;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cohen D,
                                                                             Query Match
                                                                                                                  Matches
                                                                                                                                                                                                                                                                     AAZ71533
                                                                                                                                                                                                                                                                                                        SXS
                                                                                                                                                        à
                                                                                                                                                                                         pp
```

ð g (first entry)

```
Novel biallelic markers used to construct a high density disequilibrium
                                                                                              Human biallelic marker downstream amplification primer SEQ ID NO:8439.
                                                                                                                                                           genomic map; haplotype; phenotype; polymorphic base; genotyping;
haplotyping; hybridisation; identification; characterisation;
amplification; single nucleotide polymorphism; SNP; PCR primer;
                                                                                                                                        Human genome; biallelic marker; high density disequilibrium map;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 8; Page 2030; 2745pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                map of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-013267/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GEST ) GENSET
                                                                                                                                                                                                                        diagnosis; ss
                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                   W09954500-A2
                                                                                                                                                                                                                                                                                                                                                                                 21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                        21-APR-1998;
23-NOV-1998;
                                                            10-SEP-2001
                                                                                                                                                                                                                                                                                                                                           28-OCT-1999.
                    AAZ74083;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cohen D,
  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ор
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ7401 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  pharmaceutical agents acting on a disease as well as other treatment.

N.B. The SEQ ID NOS 2852, 2913, 2974, 3035, 3096, 3157, 3227, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel biallelic markers used to construct a high density disequilibrium
                                                                                                                                                                                                                                                         Human biallelic marker downstream amplification primer SEQ ID NO:7891.
                                                                                                                                                                                                                                                                                               Human genome, biallelic marker, high density diseguilibrium map, genomic map, haplotype, phenotype, polymorphic base, genotyping, haplotyping, identification; characterisation; amplification, single nucleotide polymorphism; SNP, PCR primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; 1ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 BP; 3 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chumakov I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 8; Page 1913; 2745pp; English.
                                                                                                                                        BP.
CTGGTGTATGGGTAT 992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-IB000822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0082614P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0109732P
                                   crecretriar 15
                                                                                                                                        AAZ73535 standard; DNA; 18
                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 86.7<sup>5</sup>
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cohen D, Blumenfeld M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of the human genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-013267/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (GEST ) GENSET
                                                                                                                                                                                                                                                                                                                                                                                 diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9954500-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-APR-1998;
23-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-OCT-1999.
                                                                                                                                                                                                                     10-SEP-2001
                                                                                                                                                                              AAZ73535;
978
                                                                                                RESULT 831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           шар
                                                                                                                     AAZ73535
```

Chumakov I;

Blumenfeld M,

98US-0082614P. 98US-0109732P. 99WO-IB000822

```
ö
AAZ65654 to AAZ69578 represent human biallelic markers from the present invention, which contain a polymorphic base at position 24 of their nucleotide sequences. AAZ69579 to AAZ7440 represent amplification primers for the biallelic markers. The biallelic markers of the invention have a variety of uses: they can be used for high density mapping of the human genome, and in complex association studies and haplotyping studies which are useful in determining the genetic basis for disease states. Compositions and methods of the invention can also be useful for the identification of the targets for the development of pharmaceutical agents and diagnostic methods, as well as the characterisation of the differential efficacious responses to and side effects from differential efficacious responses to and side effects from differential agents acting on a disease as well as other treatment.

N.B. The SEO ID NOS 2852, 2913, 2974, 3035, 3167, 327, 3297 and 3367, are not actually given a sequence in the Sequence Listing from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human NF-kappa-B p65 subunit antisense oligodeoxynucleotide ISIS# 23770.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; anti-inflammatory; cytostatic; antimicrobial; infection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; cive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 5 A; 0 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA30403 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           734 ATAGGACTTGGTAGG 748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 ATAGGATGTGGTAGG 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA30403;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 833
AAA30403/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
```

0;

Gaps

0;

CTGAGATGCACTTAC 894

880

ð d

CTGAGATGCCTTTAC 18

BP.

AAZ74083 standard; DNA; 18

RESULT 832

AAZ74083 ID AAZ7

```
Antisense compounds which inhibit the expression of the human NF-kappa-B p65 subunit (p65) useful for treating diseases associated with p65 expression and as prophylaxis to prevent of delay infection, inflammation
                                                                       /note= "all or some internucleoside bonds are phosphorothicate and optionally some sugars may be 2'
antisense inhibition; inflammation; transcription factor; apoptosis;
                                              Location/Qualifiers
                                                                                                                                                                                                      Monia BP;
                                                                                                                                                                                                                                                                                     Example 15; Col 41; 33pp; English.
                                                                                           methoxyethyl"
                                                                                                                                                98US-00199859
                                                                                                                                                                  98US-00199859
                                                                                                                                                                                                                                                                                                                                                                                                                                     automated DNA synthesiser
                                                                                                                                                                                                      Cowsert LM,
                                                             /*tag=
                                                                                                                                                                                    (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                      WPI; 2000-410858/35
                                                                                                                                                                                                                                                                    tumor formation.
                                              Key
modified_base
                           Homo sapiens
                                                                                                                                                25-NOV-1998;
                                                                                                                                                                  25-NOV-1998;
                                                                                                                                                                                                     Bennett CF,
                                                                                                            US6069008-A.
                                                                                                                             30-MAY-2000
          cancer; ss.
```

```
Kappa-B proteins are involved in a diverse set of signaling pathways involving stress, apoptosis, cancer, growth, infection and inflammation. Antisense oligonucleotides are able to inhibit expression of the p65 subunit and may therefore be used in the treatment of disorders associated with NF-kappa-B p65 subunit expression. They may be used as a prophylaxis to prevent or delay infection, inflammation or tumour formation. Antisense compounds may also be used for research and diagnostics because they hybridise to nucleic acids encoding NF-kappa-B p65 subunit mRNA levels was measured using real-time quantitative PCR and Northern blot analysis. Antisense oligonucleotides were synthesised on an
The present sequence is one of a number of oligonucleotides designed to target different regions of the human NF-kappa-B p65 subunit, which is a member of the Rel/NF-kappa-B family of transcription factors. Rel/NF-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 BP; 6 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
```

Gaps .. Score 11.8; DB 1; Length 18; Pred. No. 6.8e+02; 0; Mismatches 2; Indels 0; 4.1%; AAGAGCTCTCCTCCA 812 13; Conservative Similarity 798 Query Match Local Matches à

ö

~ AAGACTTCTCCTCCA 16 RESULT 834 묩.

AAF20095 standard; DNA; 18

AAF20095;

(first entry) 14-MAR-2001 AAF20095/ 1D AAF2 AC AAF2 XX AAF2 XX I4-M XX DE Huma XX Low KW Low KW huma KW surf

Human eosinophil major basic protein polynucleotide fragment #1662.

Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory;

respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhintis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis; antiasthmatic; analgesic; hypotensive; cancer; ss.

Homo sapiens

WO200062736-A2 

26-OCT-2000

24-MAR-2000; 2000WO-US008020.

99US-0127958P. 06-APR-1999;

UNIV EAST CAROLINA. (UYEC-) (NYCE/)

Nyce JW;

WPI; 2000-679539/66.

Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.

Claim 14; Page 260; 1592pp; English.

The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense cligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodiator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with cativaring peptide factors and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokines and chemokine receptors, adenosine receptors, bradykinin receptors, central creceptors, adenosine receptors, bradykinin receptors, central creceptors, defensins, growth factors, bradykinin receptors, central creceptors, brinding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bunochoconstriction) and/or lung inflammation, allergy (es) and/or surfactant hypoproduction which are associated with a disease or condition selected from pulmonary vasoconstriction, inflammation, allergy conditions impeded respiratory vasoconstriction, inflammation, allergy conditions, mand/or lung inflammation, allergy (es) and/or bronchoconstriction, and/or lung inflammation, allergy (es) and/or surcer assumply are appressed or condition, emphysema, chronic obstructive pulmonary disease (OPPD), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary transplantation rejection, pulmonary undertions, bronchitis, and/or cancer AAFIRJ44 to AAFIZ1643 represent human polynucleotide fragment invantions eligonucleotides used in the exemplification of the present invention

Sequence 18 BP; 0 A; 6 C; 4 G; 8 T; 0 U; 0 Other;

Gaps .; 0 4.1%; Score 11.8; DB 1; Length 18; 16.7%; Pred. No. 6.8e+02; ve 0; Mismatches 2; Indels 86.7%; Conservative Query Match Best Local Similarity 13; Matches

ö

949 GCAAGAAGAGCCAAA 963 GCAACAAGAGCGAAA 2 16 qq à

RESULT 835

```
Human major basic protein polynucleotide fragment #1522.
                                                                                                                                                                                  Claim 14; Page 257; 1592pp; English.
   AAF19955 standard; DNA; 18 BP.
                                                                                                                24-MAR-2000; 2000WO-US008020.
                                                                                                                         99US-0127958P.
                                                                                                                                                                         and respiratory obstructions.
                                                                                                                                  UYEC-) UNIV EAST CAROLINA.
                    (first entry)
                                                                                                                                                       WPI; 2000-679539/66.
                                                                                                                                      (NYCE/) NYCE J W.
                                                                                              WO200062736-A2
                                                                                      Homo sapiens.
                                                                                                                         06-APR-1999;
                    14-MAR-2001
                                                                                                        26-OCT-2000.
                                                                             cancer; ss.
            AAF19955;
                                                                                                                                               Nyce JW;
AAF19955/c
```

Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy(ies) and/or surfactant hypoproduction which are associated with a disease or Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; burnation depletion; respiratory; bronchodilator; antinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pani; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis; The present invention describes low adenosine (A) content antisense oligonuclectides and compositions (I) comprising them. In the antisense oligonuclectides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with lung/respiratory disorders and malignancies, such as stimulating and activating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, bracking proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system receptors, CNS and peripheral nervous and non-nervous system peptide transmitters, defensins, growth factors, vasoactive peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CF), allergic rhinitis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), pulmonary transplantation rejection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide fragments and antisense oligonucleotides used in the exemplification of the present invention condition selected from pulmonary vasoconstriction, inflammation,

```
..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (I) selected from: PRO1269; PRO1269; PRO1375; PRO1361; PRO334; PRO4367; PRO1265; PRO1269; PRO1269; PRO1269; PRO1269; PRO1269; PRO1269; PRO1269; PRO4364; PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes an antibody that binds to a human protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AACS8122 and AAB24021 to AAB24040 represent human PRO polynucleotide and
protein sequences given in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inhibit
PRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, tumour; diagnosis, neoplastic disease; proliferation; cancer; identification; tumourigenesis; anticancer; detection; hybridisation;
                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wood WI;
                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Antibodies specific for PRO polypeptides, used to diagnose and the growth of tumors in mammals, and to identify inhibitors of
                                              4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Watanabe CK,
                                                                                                     Indels
                                                                                                     ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
Sequence 18 BP; 0 A; 6 C; 4 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human PRO1780 forward PCR primer SEQ ID NO:71.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Roy MA,
                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 20; Page 123; 226pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gurney AL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  polypeptide activity or expression.
                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US020111.
99US-0162506P.
99WO-US028313.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99WO-US028551.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US005028
                                                                                                                                                            949 GCAAGAAGAGCCAAA 963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US028634
                                                                                                                                                                                                                                                                                                                                               AAC58049 standard; DNA; 18
                                                                                                                                                                                                              16 GCAACAAGAGCGAAA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                     13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Goddard A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            probe; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2000-594320/56.
                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200053750-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               08-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Botstein D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      14-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                 AAC58049;
                                                                                                                                                                                                                                                                                              RESULT 836
                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                      AAC58049
Š
                                                                                                                                                                                                              g
                                                                                                                                                                                                                                                                                                                                                                           ð
```

. 0

Gaps

..

Indels

4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02;

0; Mismatches

13; Conservative

Matches

Query Match Best Local Similarity

```
Antisense oligonucleotide ISIS# 30431
04-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        qq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   animal which comprises administering mammalian obesity (08) polypeptide. The products of the invention have anorectic activity. The OB polypeptide at a dose of 5 mg/g/day in 300 micro littres of PBS was injected intraperitoneally into mice. Control mice were injected with PBS dialysate of the recombinant protein. The body weight of the mice was noted. The results shows that recombinant the OB polypeptide is capable of reducing a body weight and is found to be effective when it is administered daily. The OB polypeptide acts as a part of the signalling pathway by which adipose tissue communicates with the brain and other organs. (I) is useful for modulating body weight of an animal especially humans. This sequence represents a PCR primer used in the amplification of a human OB protein described in the method of the invention
                                                                                                                                                                    This invention describes a novel method for modifying body weight of an
                                                                                                                                                                                                                                                                                                                                                                                                                   Modifying body weight of an animal comprises administering mammalian obesity polypeptide obtained from humans and murine.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 10; Col 151-152; 153pp; English.
                                                                                                                                                      Human OB DNA PCR primer sWSS2367 #1.
                                                                                                                                                                                                                                                                                                                                                                         Zhang Y, Friedman JM;
                                                                                                                                                                                                                                                                                                      94US-00392345.
94US-00347563.
95US-00438431.
                                                                                     AAA12345 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                  95US-00485942.
                              crcredrecccacae 15
                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 86.7;
Matches 13; Conservative
         CTCTGGTGCCAAGAG
                                                                                                                                                                                                                                                                                                                                                  (UYRQ ) UNIV ROCKEFELLER
                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2000-302788/26
                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                               07-JUN-1995;
                                                                                                                                                                                                                                                                                                      17-AUG-1994;
                                                                                                                                                                                                                                                                                                                 30-NOV-1994;
                                                                                                                                                                                                                                                                                                                            10-MAY-1995;
                                                                                                                                                                                                                                    US6048837-A.
                                                                                                                                 18-AUG-2000
                                                                                                                                                                                                                                                          11-APR-2000
                                                                                                                                                                                                                                                                                                                                                                         Proenca R,
                                                                                                            AAA12345;
         788
                               Н
                                                               RESULT 837
                                                                                                                                                                                       PCR
                                                                            AAA12345
                                                                                                                                                                              8
         ò
                             g
```

```
ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence is one of a large number of antisense oligonucleotides which is directed against one of four human steroid receptor RRA activator (SRA) nucleic acid sequences. Two series of antisense oligonucleotides were synthesised. The first series comprised 9-30 oligodeoxynucleotides with a phosphorothicate backbone. The second series comprised chimeric oligonucleotides composed of a central gap region, consisting of ten 2'-deoxynucleotides, which was flanked on both sides by four-nucleotide wings. The wings were composed of 2'-methoxyethyl (2'-MOE) nucleotides. Both series contained the same mucleotide sequences. The antisense compounds are useful for research, diagnosis, treatment and prophylaxis to prevent or delay infection, inflammation or tumour formation. Therapeutically the oligonucleotides are highly safe and are effectively administered to humans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense compounds targeted to steroid receptor RNA activator useful for diagnosis, prophylaxis and treatment of diseases associated with the steroid activator, such as infection, inflammation or tumor formation.
Human, SRA; steroid receptor RNA activator; cytostatic; antiinflammatory; SRA inhibitor; cancer; infection; antisense oligonucleotide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, mouse, anabolic, cytostatic, immunostimulant,
OB polypeptide inhibitor, body weight, obesity, OB gene, cancer, AIDS,
anorexia nervosa, hypertension, heart disease, Type II diabetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human OB gene sequence tagged-site-specific PCR primer #37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 6 A; 5 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            O'malley BW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 16; Col 42; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                      (ISIS-) ISIS PHARM INC.
(BAYU ) BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAC62703 standard; DNA; 18 BP
                                                                                                                                                                                                                                                           99US-00280409.
                                                                                                                                                                                                                                                                                                                 99US-00280409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       783 AGCCCCTCTGGTGCC 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-FEB-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bennett CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-586211/55.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PCR primer; ss.
                                                                                                                                                                                                                                                           29-MAR-1999;
                                                                                                                                                                                                                                                                                                                 29-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                           JS6107092-A.
                                                                                                                                                                                                   22-AUG-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US6124439-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cowsert LM,
                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAC62703;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
```

ö

Gaps

.

855 TCCTGGCTCCAGTTG 869

à d

rccreectrcarrie 18

AAA92612 standard; DNA; 18

RESULT 838

AAA92612

AAA92612/c ID AAA92 XX AC AAA92 XX

WPI; 2000-638247/61.

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present sequence is a PCR primer which was used in an invention relating to the control of body weight of animals including humans. Antibodies against the mammalian obesity (0B) polypeptide have been identified. The antibodies are useful for modulating the activity of 0B to control body weight and fat content and/or to treat certain pathological conditions in which there is abnormal depression or levation of body weight. The antibodies are used to treat weight loss associated with cancer, AIDS and anorexia nervosa. They are useful for the diagnosis of nutritional disorders such as obesity and diseases associated with obesity, such as hypertension, heart disease and Type II diabetes. The kits are used to determine the presence or amount of 0B in the blood or plasma of an individual
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel antibody to mammalian obesity polypeptide useful for diagnosis and treatment of weight loss associated with disorders such as cancer, AIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Prolactin regulatory element binding protein; PREB protein;
kinase-mediated hormonal regulator; transcription factor; 1P element;
prolactin promoter; osteoporosis; cancer; autoimmune disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             graft-versus-host disease; trisomy 2p; probe; PCR primer; ds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 18; 6.7%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer used to amplify a human PREB gene fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 10; Col 81-82; 150pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fliss M, Clelland CL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (MOUN ) MOUNT SINAI SCHOOL MEDICINE
                                                                                                                                                                                                                                                                                                                                                      Zhang Y, Friedman JM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA75986 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-MAR-2000; 2000WO-US007642.
                                                                                        95US-00488214.
                                                                                                                                                     94US-00292345.
                                                                                                                                                                                          94US-00347563.
                                                                                                                                                                                                                     95US-00438431.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       855 TCCTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4 rccreccrrcarrig 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13; Conservative
                                                                                                                                                                                                                                                                               (UYRQ ) UNIV ROCKEFELLER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and anorexia nervosa.
                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2000-611018/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bancroft CF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-SEP-2000.
                                                                                           07-JUN-1995;
                                                                                                                                                                                          30-NOV-1994;
                                                                                                                                                                                                                         10-MAY-1995;
                                                                                                                                                        17-AUG-1994;
                       26-SEP-2000
                                                                                                                                                                                                                                                                                                                                                          Proenca R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA75986,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       THE SECTION OF SECTION
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel antisense compounds useful for inhibiting the expression of human 3-phosphoinositide dependent protein kinase-1, useful e.g. for treating inflammation, tumors and infections.
                                                                                                                               The specification describes a prolactin regulatory element binding (PREB) protein. The protein is a kinase-mediated hormonal regulator of prolactin gene expression, i.e. a transcription factor. The protein binds to the lP element pf the prolactin promoter. PREB proteins are useful for treating osteoporosis. PREB modulators are useful for treating cancer, autoimmune diseases by inhibiting the expression of prolactin. PREB antisense sequences are also useful for treating a development defect. Inhibition of prolactin gene expression is useful for inhibiting graft-versus-host diseases in transphantations. PREB polymucleotides are useful as a probe for diagnosing trisomy 2p in a subject. PCR primers AAA75984-87 were used to amplify a human PREB gene fragment
                                             New polynucleotide encoding prolactin regulatory element binding protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present sequence is one of a large number of antisense oligonucleotides which are targeted to a nucleic acid molecule encoding human 3 sphosphoinositide dependent protein kinase-1 (PDK-1). The antisense compounds may be oligodeoxynucleotides or chimeric oligonucleotides containing a central gap region, consisting of ten 2'-
                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                 useful for treating osteoporosis, cancer and autoimmune diseases
                                                                                                                                                                                                                                                                                                                                                                                                                               .;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; PDK-1; 3-phosphoinositide dependent protein kinase-1; antisense oligonucleotide; phosphorothioate; antiinflammatory; cytostatic; antimicrobial; ss.
                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; rive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human PDK-1 antisense oligonucleotide ISIS #29251.
                                                                                                                                                                                                                                                                                                                                                          Sequence 18 BP; 8 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                       Example; Page 57; 87pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 3; Col 39; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-00289466.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-00289466.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAC60660 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18 CACATTTCTTCTG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 86.79
Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       831 CICITITICICICIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Monia BP, Cowsert LM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-611015/58.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US6124272-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAC60660;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAC60660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

0;

Gaps

.

Indels

Length 18;

4.1%; Score 11.8; DB 1; 86.7%; Pred. No. 6.8e+02; iive 0; Mismatches 2;

788 CTCTGGTGCCAAGAG 802 CICIGGIGCCCACAG 15

Conservative

13;

Matches

Best Local Similarity

Query Match

```
Fong S;
Hillan KJ;
Watanabe CK;
         MOE) wings. The oligonucleotides have a phosphorothioate backbone. The antisense oligonucleotides are useful for inhibiting the expression of human PDK-1 in human cells or tissues. They are also useful for preventing or delaying infection, inflammation or tumours and are useful
deoxynucleotides, which is flanked on both sides by 2'-methoxyethyl (2'-
                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ferrara N,
Gurney AL, 1
A, Tumas D,
                                                                                            Score 11.8; DB 1; Length 18;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                           Primer #136 used in the identification of proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baker KP, Botstein D, Desnoyers L, Eaton DL, Fr
Gao W, Goddard A, Godowski PJ, Grimaldi CJ, Gu
Pan J, Paoni NF, Roy MA, Smith V, Stewart TA,
                                                                        Sequence 18 BP; 4 A; 3 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                               Secreted; transmembrane; gene therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                    99US-0141037P
99US-014478P
99US-0145698P
99WO-US020111
99WO-US0288313
99WO-US0288513
99WO-US030095
                                                                                                                                                                                                            AAF54529 standard; DNA; 18 BP
                                                                                            4.1%;
86.7%;
                                                    for research and diagnostics
                                                                                                                                      790 CTGGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                                                                                2000WO-US004342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US000219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000WO-US000376
                                                                                Query Match
Best Local Similarity 86.79,
Thes 13; Conservative
                                                                                                                                                          creereccaaeerr 17
                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                       WO200078961-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JAN-2000;
06-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pan J, Paoni
Williams PM,
                                                                                                                                                                                                                                                                                                                   Unidentified.
                                                                                                                                                                                                                                                                                                                                                                                 18-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                         26-JUL-1999;
01-SEP-1999;
29-OCT-1999;
30-NOV-1999;
                                                                                                                                                                                                                                                      02-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                            28-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                      23-JUN-1999
                                                                                                                                                                                                                                 AAF54529;
                                                                                                                                                                                      88888888
                                                                                                                                                        셤
```

VRN1; vernalisation; flowering; crop; PCR primer; ss.

Arabidopsis thaliana

WO200121822-A1.

29-MAR-2001

13-SEP-2000; 2000WO-GB003525.

99GB-00022071.

17-SEP-1999;

(PLAN-) PLANT BIOSCIENCE

Levy YY;

Dean C,

WPI; 2001-273467/28.

A thaliana VRN1 gene PCR primer V10.

(first entry)

05-NOV-2001

AAF62423;

BP.

AAF62423 standard; DNA; 18

RESULT

ö

Gaps

음 ò

```
o.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention provides the protein and coding sequences of Arabidopsis thaliana WRN1. This protein is capable of altering the vernalisation responses of a plant. Also provided are a number of PCR primers used to isolate the sequences. The sequences are useful in the production of corp plants, where they are able to control the timing of flowering, the duration of vernalisation required, the optimum temperature, or even eliminate the need for vernalisation completely. The present sequence is a PCR primer used to isolate the VRN1 coding sequence
                                                                                                                                                                                                                                                                                                                                                                Novel VRN1 polynucleotide sequence encoding a polypeptide which alters vernalization response of plant in which VRN1 nucleic acid is expressed, useful for influencing and assessing vernalization phenotype of plants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 18; ilarity 86.7%; Pred. No. 6.8e+02; Conservative 0; Mismatches 2. Tandola
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 18 BP; 9 A; 2 C; 7 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A thaliana VRN1 gene PCR primer V7
                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 10; Page 75; 91pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF62422 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 réréregrérérér
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    830 TCTCTTTTCTTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
es 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          05-NOV-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF62422;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF62422
ID AAF6
XX
AC AAF6
XX
DT 05-N
XX
XX
g
```

The present invention relates to secreted and transmembrane proteins. These proteins and the DNA encoding them may be used as hybridization probes, in chromosome and gene mapping and in the generation of antisense RNA and DNA. They may also be used used to generate either transgenic animals or knockout animals which are in turn useful for development and screening of therapeutically useful reagents. The nucleic acids may also be used in gene therapy

Sequence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;

Secreted and transmembrane proteins and nucleic acids designated PRO, useful as hybridization probes, in chromosome and gene mapping and gene

WPI; 2001-071395/08.

Example 143; Page 507; 787pp; English.

therapy

```
.;
0
                                                                                                                                                                                                                                                                                                                                                                     The present invention provides the protein and coding sequences of Arabidopsis thaliana VRN1. This protein is capable of altering the vernalisation responses of a plant. Also provided are a number of PCR primers used to isolate the sequences. The sequences are useful in the production of crop plants, where they are able to control the timing of flowering, the duration of vernalisation required, the optimum temperature, or even eliminate the need for vernalisation completely. The present sequence is a PCR primer used to isolate the VRN1 coding sequence
                                                                                                                                                                                                                                                                             Novel VRN1 polynucleotide sequence encoding a polypeptide which alters vernalization response of plant in which VRN1 nucleic acid is expressed, useful for influencing and assessing vernalization phenotype of plants.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tumour suppressor gene 16; TSG16; immune response modulator; inflammatory response modulator; signal transduction activator; cytokine inhibitor; gene therapy; anticancer; anti-inflammatory; autoimmune disorder; infection; chromosome 16q24.3; human; cellular proliferation suppressor; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2; Indels
             VRN1; vernalisation; flowering; crop; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 18 BP; 0 A; 7 C; 2 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1;
16.7%; Pred. No. 6.8e+02;
ve 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (WOME-) WOMEN'S & CHILDREN'S HOSPITAL.
                                                                                                                                                                                                                                                                                                                                           Claim 10; Page 75; 91pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-OCT-2000; 2000WO-AU001329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99AU-00003771
                                                                                                                                                                                            (PLAN-) PLANT BIOSCIENCE LTD.
                                                                                                                                  13-SEP-2000; 2000WO-GB003525.
                                                                                                                                                              99GB-00022071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rcrcreercricici 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAH27339 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               830 TCTCTTTTCTCTCT
                                           Arabidopsis thaliana
                                                                                                                                                                                                                                                  WPI; 2001-273467/28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200132861-A1.
                                                                         WO200121822-A1
                                                                                                                                                                                                                         Levy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PCR primer #8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-OCT-1999;
                                                                                                                                                              17-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .0-MAY-2001
                                                                                                     29-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAH27339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                        Dean C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAH27339/
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            q
```

```
The present invention relates to human tumour suppressor gene 16 (TSG16; see AAH2368B). TSG16 was isolated from chromosome 16q24 3. TSG16 suppresses cellular proliferation. TSG16 is useful for treating disorders associated with decreased expression or activity of TSG16, e.g. cancers, (auto)immune disorders, inflammation, complications of wound healing and infections (by viruses, bacteria, fungi, parasites, protozoa or helminths). The present sequence is a PCR primer, which was used in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to a composition for stimulating an immune response in a patient having an adenocarcinoma or colorectal cancer. The composition comprises an allogeneic tumour cell selected from SW620 cell, COLO 205 cell and SW403 cell, and a physiological carrier. The allogeneic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Colorectal cancer; immunostimulant; cytostatic; immune response; MAGE-4; adenocarcinoma; allogeneic tumour cell; SW620 cell; COLO 205 cell; ss; SW403 cell; colon; breast; lung; prostate; cancer; vaccine; PCR primer.
Crawford J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New composition comprising an allogeneic tumor cell, useful for stimulating an immune response in a patient having an adenocarcinoma, especially useful for treating colorectal, breast, lung or prostate
                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                    New nucleic acid representing the human tumor suppressor gene TSG16,
                                                                       useful e.g. for diagnosis and treatment of tumors, inflammatory and immunological disorders.
                                                                                                                                                                                                                                                                                                                                                                                          .0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Reverse PCR primer used in analysis of tumour antigen MAGE-4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DP;
                                                                                                                                                                                                                                                                                                                                                         4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gold
Kochetkova M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Carlo DJ,
                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 1 A; 6 C; 7 G; 4 T; 0 U; 0 Other;
 Kremmidiotis G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bartholomew RM,
                                                                                                                                      Disclosure; Page 189; 215pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 1; Page 50; 131pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SIDNEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAS11421 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-JAN-2000; 2000US-0178498P.
28-FEB-2000; 2000US-0185335P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (KIMM-) KIMMEL CANCER CENT SI
(IMMU-) IMMUNE RESPONSE CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-JAN-2001; 2001WO-US002731.
                                                                                                                                                                                                                                                                                                                                                                                                                                 783 AGCCCCTCTGGTGCC 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 86.7 ses 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCCCCACTGGAGCC
 Whitmore SA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shawler DL,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2001-502616/55.
                                  WPI; 2001-316439/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200154716-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             02-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-OCT-2001
 Callen DF,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sobol RE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAS11421;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15
                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAS11421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 qq
```

ö

Sequence 18 BP; 2 A; 7 C; 4 G; 5 T; 0 U; 0 Other;

patient. The composition is useful for stimulating an immune response in adenocarcinoma, e.g. colon, breast, lung or prostate adenocarcinoma. The use of allogeneic tumour cells provides a generic source of antigen that can be administered to a variety of patients, in contrast to using autologous tumour cells, which must be isolated from each individual patient. The allogeneic cells are suitable as a cancer vaccine and can stimulate an immune response against autologous tumour cells of a cancer patient. The present sequence represents the reverse stimulates an immune response to an autologous tumour cell in the PCR primer used in gene expression analysis of tumour antigen MAGE-4

Sequence 18 BP; 4 A; 5 C; 6 G; 3 T; 0 U; 0 Other;

Score 11.8; DB 1; Length 18; Pred. No. 6.8e+02; 0; Mismatches Query Match
Best Local Similarity 86.7%;
Matches 13; Conservative 0 877 TTCCTGAGATGCACT 891 18 Trccreagacecagr 4  $\delta$ d

ö

Gaps

..

2; Indels

AAF94724 standard; DNA; 18 AAF94724;

BP

Rho C antisense phosphorothioate oligonucleotide SEQ ID 148.

23-MAY-2001 (first entry)

Rho; GTP binding protein; phosphorothioate antisense oligonucleotide; RhoA; RhoB; RhoC; RhoG; Rac 1; cdc42; hyperproliferative condition; cancer; wound healing; clotting; ischaemia; reperfusion; reoxygenation;

Homo sapiens.

WO200115739-A1

08-MAR-2001.

99US-00387341 31-AUG-1999;

18-AUG-2000; 2000WO-US022808

(ISIS-) ISIS PHARM INC.

WPI; 2001-191677/19.

Roberts ML, Cowsert LM;

An antisense compound targeted to a nucleic acid molecule encoding a member of the human Rho family of small GTP binding proteins useful for treating e.g. cancer and ischemia.

Example 16; Page 73; 156pp; English.

This invention relates to an antisense compound targeted to a nucleic acid molecule encoding a member of the human Rho family of small GTP binding proteins, where the antisense compound inhibits the expression of the member of the human Rho family. The invention includes antisense oligonucleotides AAF94580 - AAF94637 Which target a RhoA nucleotide sequence, AAF94645 - AAF94684 which target a RhoB nucleotide sequence, AAF94645 - AAF94725 which target a RhoC nucleotide sequence, AAF94709 which target a Rac 1 nucleotide sequence, AAF94769 which target a Rac 1 nucleotide sequence and AAF94795 - AAF94809 which target a Rac 1 nucleotide sequence and AAF94795 - AAF94800 which target byperproliferative conditions, especially cancer, abnormal wound healing or clotting conditions and isofahemial-freperfusion or recoxygenation injury. The compound may also be used to diagnose the above conditions RESULT 84,
TAPE 94724/1
ID AAF 94724

```
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to glaucoma-coding DNA sequences (AAI66120 and AAI66121) for understanding better causes and mechanism of glaucoma and to develop more effective diagnosis kits. New sequences of glaucoma-coding DNA substitute thymine for cytosine at the site of 46th arginine of conventional glaucoma-coding DNA sequence to become a stop codon and thymine for cytosine at the site of 351th threonine of conventional glaucoma-coding DNA sequence to express isolaucine. The present sequence is that of a PCR primer, useful to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New glaucoma-coding DNA sequences for studying glaucoma and developing
                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                               .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .<u>.</u>
Score 11.8; DB 1; Length 18;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; tive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                  Human; glaucoma-coding DNA; glaucoma; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 18 BP; 7 A; 4 C; 6 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                        Human glaucoma-coding DNA related PCR primer 9.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C neoformans strain discrimination probe #48.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; Page 3; 7pp; Korean.
                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAF98230 standard; DNA; 18 BP
                                                       744 GIAGGGTCCCAGGGT 758
                                                                                                                                                                                                                                                                                                                                                                            99KR-00053486
                                                                                                                                                                                                                                                                                                                                                                                                       99KR-00053486.
 Query Match
Best Local Similarity 86.7%;
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              728 CIGGICALAGGACIT 742
                                                                                                                                                     AAI66130 standard; DNA; 18
                                                                                 15 Gradegacccadagr 1
                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              SJ:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Credricatrescerr
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Kim
                                                                                                                                                                                                                                                                                                                                                                                                                                 (EYEG-) EYEGENE INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-637115/73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
es 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kim HS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               diagnostic kits.
                                                                                                                                                                                                                                                                                                                       KR2001048693-A
                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                       29-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                            29-NOV-1999;
                                                                                                                                                                                                           15-JAN-2002
                                                                                                                                                                                                                                                                                                                                                 15-JUN-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-JUN-2001
                                                                                                                                                                                  AA166130;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF98230;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ju CG,
                                                                                                                           RESULT 848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loc
Matches
                                                                                                                                         AAI66130,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAF98230
                                                                                 g
                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BXXXXX
```

(CHIB-) CHIBA PREFECTURE.

Nakagawara A;

```
The present invention describes an assemblage comprising two primers, each of which can be used to amplify the intergenic spacer region IGS1 from one of various strains of the yeast Cryptococcus neoformans. A number of primers and probes are provided, as are the sequences of the IGS1 for 91 C. neoformans strains. This is useful in the discrimination of pathogenic yeasts, and the sequences can be used to construct a database having the same purpose. The present sequence is a probe or
           Pathogen; yeast; intergenic spacer region; IGS1; PCR primer; probe; ss.
                                                                                                                                                                                                                                                                                          Novel assemblage useful for discriminating among pathogenic yeasts, comprises two universal primers adapted for nucleic acid amplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human, chromosome 1, 1p36; neuroblastoma cell line; NB-1; anticancer; tumour suppressor; human 1p36 homozygosity deletion domain; tumour; diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human chromosome 1p36 region PCR primer SEQ ID NO:22.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP; 8 A; 3 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                primer described in the invention
                                                                                                                                                                                                                                                                                                                                                    Claim 6; Page 19; 88pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (HISM ) HISAMITSU PHARM CO LTD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-MAY-2000; 2000JP-00136266.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               31-AUG-2000; 2000WO-JP005930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99JP-00245962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             949 GCAAGAAGAGCCAAA 963
                                                                                                                        29-SEP-2000; 2000WO-US026758
                                                                                                                                                      99US-0156598P
                                                                                                                                                                               (GENE-) GENETIC VECTORS INC. (FELL/) FELL J. (DIAZ/) DIAZ M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 GCAAGTAGAGTCAAA 15
                                                                                                                                                                                                                                       Σ̈́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF97808 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                                                                                       Diaz M, Mccabe
                                       Cryptococcus neoformans
                                                                                                                                                                                                                                                                 WPI; 2001-258138/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200116311-A1.
                                                                   WO200123616-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-AUG-1999;
                                                                                                                                                      29-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-MAR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF97808;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                           protocol
                                                                                                                                                                                                                                       Fell J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF97808
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
```

```
ò
                                                                                                                                                                                              The present invention describes a homozygosity deletion domain co-
existing in the 36-position of the first chromosome short arm (1p36) in
human neuroblastoma. Also described are base sequences from the 1p36
position of human neuroblastoma cell lines (NB-1 and NASS-NB-SCH-1),
which are tumour suppressor genes in human neuroblastoma. The genes are
tumour suppressor genes, base sequence data of which are applicable as
tumour markers and reagents in studying mechanism of tumour body
formation, and gene diagnosis of tumours as well as in developing anti-
cancer drugs. AAF97787 to AAF97789 represent PCR primers used in the
exemplification of the present invention, and AAF97830 to AAF97814
                                                                                               Human 1p36 homozygosity deletion domain from the 36-position of first chromosome short arm in human neuroblastoma cell lines, applicable e.g. in gene diagnosis of tumors as well as in developing anti-cancer drugs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human 1p36 homozygosity deletion domain from the 36-position of first chromosome short arm in human neuroblastoma cell lines, applicable e.g. in gene diagnosis of tumors as well as in developing anti-cancer drugs.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; chromosome 1; 1p36; neuroblastoma cell line; NB-1; anticancer; tumour suppressor; human 1p36 homozygosity deletion domain; tumour; diagnosis; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                            4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human chromosome 1p36 region PCR primer SEQ ID NO:21.
                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 18 BP; 2 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 5; Page 20; 226pp; Japanese
                                                                                                                                                                     Example 6; Page 25; 226pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (HISM ) HISAMITSU PHARM CO LID. (CHIB-) CHIBA PREFECTURE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF97807 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-MAY-2000; 2000JP-00136266.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99JP-00245962.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   31-AUG-2000; 2000WO-JP005930.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  772 CTTCTGAGGGCAGCC 786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 crrcgcacgrcaccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-226686/23.
                                                                WPI; 2001-226686/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200116311-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nakagawara A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAY-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-MAR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF97807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QD
ð
```

.

```
The present invention describes a homozygosity deletion domain cohumsing in the 36-position of the first chromosome short arm (1p36) in human neuroblastoma. Also described are base sequences from the 1p36 position of human neuroblastoma cell lines (NB-1 and MASS-NB-SCH-1), which are tumour suppressor genes in human neuroblastoma. The genes are tumour suppressor genes in human neuroblastoma. The genes are tumour markers and reagents in studying mechanism of tumour body formation, and gene diagnosis of tumours as well as in developing anticancer drugs. AAF97787 to AAF97789 represent PCR primers used in the exemplification of the present invention, and AAF97830 to AAF978974
      8X666666666666666
```

Sequence 18 BP; 2 A; 6 C; 6 G; 4 T; 0 U; 0 Other;

```
4.1%; Score 11.8; DB 1; Length 18; 06.7%; Pred. No. 6.8e+02; ve 0; Mismatches 2; Indels
                                                          772 CTTCTGAGGGCAGCC 786
               86.7%;
                                                                                       CTTCGGAGGTCAGCC 18
                           13; Conservative
Query Match
Best Local Similarity
                                                                                       4
                           Matches
                                                          ð
```

RESULT 852 ABL44918

ABL44918 standard; DNA; 18 BP ABL44918; HANDER BY SERVICE COURSE OF SERVICE SE

(first entry) 11-APR-2002

Human chromosome 1p36-35 PCR primer SEQ ID NO:1962.

Human; chromosome 1p36-35; chromosome 21q22.1; genetic analysis; genome; PCR primer; ss

Homo sapiens

JP2001321190-A.

20-NOV-2001.

12-MAR-2001; 2001JP-00068285

10-MAR-2000; 2000JP-00066716

(RIKA ) RIKAGAKU KENKYUSHO. (GENO-) GENOTEX YG.

WPI; 2002-144136/19.

Claim 4; Page 43; 528pp; Japanese.

Arraying genome clones

The present invention describes a method of arraying genome clones. The method comprises: (a) clones of the genomic libraries contained in multiwell plates numbered for discrimination are mixed in each of the multiwell plates; (b) a primer designed based on the chromosome marker multiwell plates; (b) a primer designed based on the chromosome marker sequence; is added to the markers is detected from the resultant amplified product to specify the discrimination Nos. of the multiwell plates containing the clones having said marker sequence; (d) the order of the maximum in the specified discrimination Nos. to array the multiwell conference is changed so that the same discrimination Nos. succeed to plates; (e) the clones in the multiwell plates of the specified conference in the multiwell plates of the specified and lateral directions; (f) the mixed clones are cultured and the conference resultant cultures are amplified by using the above primer; (g) signals care detected from the amplified products; (h) the clones in the multiwell plates are specified from the detected result; and (i) the clones are reconstituted as the positions on the chromosome and arrayed. The microarray is useful for gene analysis. ABLA2957 to ABLA5322 represent

```
.
0
     1p36-35 DNA, and ABL45323 to ABL45634
                                                                                                                                                           Gaps
                                                                                                                                                           0
PCR primers for human chromosome 1p36-35 DNA, and ABL45323 to represent PCR primers for human chromosome 21q22.1, which are specifically claimed for use in the present invention
                                                                                                                 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; live 0; Mismatches 2; Indels
                                                                             Sequence 18 BP; 2 A; 4 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                             895 ITCICAGCIICIGCG 909
                                                                                                                                 ilarity 86.7%;
Conservative
                                                                                                                                                                                                                               1 recreacerrenge 15
                                                                                                               Query Match
Best Local Similarity
Matches 13; Conserv
   g
                                                                                                                                                                                             à
```

BP. ABK95416 standard; DNA; 18 RESULT 853 **ABK95416** 

ö

Gaps .. 0 ABK95416;

24-SEP-2002

Human retina specific gene MPP4, RT-PCR primer A128F.

Human, SS, RT-PCR; MPP4; C7oxf9; C12oxf7; F379; retina specific gene; AMD; age-related macular degeneration; blindness; gene therapy; Ophthalmological; transgenic; reverse transcriptase PCR; primer.

Homo sapiens.

WO200244366-A2.

06-JUN-2002

29-NOV-2001; 2001WO-EP013940.

29-NOV-2000; 2000US-0253751P.

(MULT-) MULTIGENE BIOTECH GMBH.

Weber BHF; Stoehr HB,

WPI; 2002-508512/54.

Novel nucleic acids encoding retina-specific human protein C7orf9, C12orf7, MPP4 or F379, useful for diagnosing age-related macular degeneration or predisposition for macular degeneration, and in gene therapy techniques. 

Example 1; Page 32; 120pp; English.

included are a recombinant vector containing the nucleic acid, a included are a recombinant vector containing the nucleic acid, a recombinant vector containing the nucleic acid, a recombinant by the contains the vector and expresses the protein, an inhibitor characterised in that it can suppress the activity of the protein, treating macular degeneration or a predisposition for reagent which decreases, inhibits or increases expression of a 70xf9, claorf7, MPP4 and/or F379 protein and a biologically active C70xf9, C120xf7, MPP4 and/or F379 protein and a carive or inactivated). The nucleic acid or protein is useful for diagnosing macular degeneration, preferably age-related macular degeneration (AMP) or a predisposition for macular degeneration. The reagent used in the diagnosis is a C70xf9, C120xf7, anti-C120xf7, anti-MPP4 or specific nucleic acid probe, or anti-C70xf9, anti-C120xf7, anti-MPP4 or anti-C70xf9, anti-C7 The invention relates to isolated nucleic acid encoding retina-specific human protein C7orf9, C12orf7, MPP4 or F379 or a fragment, derivative or allelic variation of the above mentioned nucleic acid sequences. Also

5555555555555<del>x</del>8

progression of macular degeneration. The proteins encoded by the nucleic acid are useful to identify further unrelated proteins which are associated with macular degeneration. The proteins which are associated with macular degeneration and for use in screening methods based on protein/protein interactions. The nucleic acid is also useful as reagents for detecting differences between normal and aberrant expression of the protein. The nucleic acid is also useful in gene therapy techniques, and can be used for gene targeting and/or gene replacement for restoring a mutant gene or for creating a mutant gene via homologous recombination, the protein can be used to identify other proteins involved in development and progression of macular degeneration. The present sequence is a reverse transcriptase (RT)-PCR primer used to isolate or study DNA corresponding to a retina specific protein of the

Sequence 18 BP; 3 A; 9 C; 1 G; 5 T; 0 U; 0 Other;

Gaps 0; 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels 13; Conservative Query Match Best Local Similarity Matches

ó

888 CACTIACITCICAGC 902 3 cacarcerrereade 17 à 셤

ABX89577 standard; DNA; 18 BP ABX89577; ABX8957 

08-MAY-2003 (first entry)

Human sequence tagged specific PCR primer sWss2367 #1.

ss; human; obese polypeptide; body weight; PCR; ob polypeptide; leptin; adipocyte; appetite reduction; cosmetic; primer; fat deposit reduction; improved body appearance; heart disease; obesity; agriculture; nutritional disorder; cancer associated weight loss; type II diabetes; obesity associated disease; AIDS associated weight loss; hypertension; gene

Homo sapiens.

US2002107211-A1

08-AUG-2002

13-DEC-2000; 2000US-00736084.

95US-00485943. 07-JUN-1995;

(UYRQ ) UNIV ROCKEFELLER

Zhang Y; Burley SK, Gajiwala K, Halaas JL, Maffei M; Friedman JM, Proenca R,

WPI; 2002-722695/78.

New obese polypeptide useful for inducing reduction of body weight in an animal, for preparing a composition for treating obesity, disease associated with obesity such as hypertension, heart disease or type II diabetes.

Example 10; Page 44; 144pp; English.

The invention relates to an obese (ob) polypeptide, also known as leptin, expressed predominantly by adipocytes and capable of inducing reduction of body weight in an animal. The polypeptide is useful for monitoring therapeutic treatment of a disease associated with elevated or decreased levels of ob polypeptide in a mammalian subject; for use in radioimmunoassays for measuring fat and/or plasma levels of ob protein or

correcting the presence and level of receptor for ob on tissues, such as hypothalamus; for screening expression libraries to isolate active creeptors; for use in cosmetics by improving body appearance by reducing fat deposits or appetite by improving body appearance by reducing fat deposits or appetite by improving body appearance by reducing conjugation with other cosmetic strategies e.g. surgery for its cosmetic effect; for identifying agonists or antagonists that affect its activity and has potential agricultural uses e.g. increasing the body weight of animals. Nucleic acid encoding the polypeptide is useful for identifying mutation in ob mucleotide, in gene therapy for obesity and in the consument of its encoded RNA and protein in nutritional disorders. A chost cell transfected with a vector expressing the polypeptide is useful for in the preparation of modulators of the polypeptide and its nucleic acid. In the preparation of modulators of the polypeptide and its nucleic acid. An immunogenic fragment of the polypeptide is useful for measuring the presence of the polypeptide in a sample; for evaluating the level of bolypeptide in a sacciated with elevated or decreased levels of bolypeptide in a comprising the polypeptide is useful for reducing body weight of an animal, in particular humans. A composition comprising an antagonist of the polypeptide is useful for increasing body weight of an animal, in particular humans. A composition comprising an antagonist of the polypeptide is useful for increasing body weight of an animal. Compositions containing the polypeptide and the antagonist are useful for containing the polypeptide and the antagonist of treating obesity, weight loss associated with cancer or AlbS, disease crassociated with obesity such as hypertension, heart disease or type II Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other; specific PCR primer 

Gaps 0; 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels Matches 13; Conservative Query Match Best Local Similarity

ó

g ð

RESULT 855 ABK49994

ABK49994 standard; DNA; 18 BP

ABK49994;

Human ZTMPO-1 gene mapping antisense primer ZC15,486.

(first entry)

15-JUL-2002

ZIMPO; human; immunosuppressive; inotropic; cardiac; leukaemia; cardiant; cytostatic; antidiabetic; hypotensive; immunological; ss; reproductive; muscle pathology; diabetes; muscular dystrophy; haematopoietic disorder; hypertension; chromosome 12q24.33; chromosome mapping; primer; ZC15,486. XX BY XX BY

Ношо

US6372889-B1.

16-APR-2002.

19-APR-1999;

98US-0082513P. 21-APR-1998;

ZYMO ) ZYMOGENETICS INC

Grossmann A; Maurer MF, Farrah TM, Conklin DC, Sheppard PO,

WPI; 2002-350566/38.

Novel isolated ZTMPO-1 polypeptide, useful for modulating cell proliferation, and for treating disorders such as diabetes, muscular dystrophy and hypertension.

This invention relates to the cDNA and protein sequences of a novel isolated ZIMPO-1 polypeptide. ZIMPO-1 is a soluble protein with homology to the nuclear membrane proteins emerin and thymopoietins. The protein of the invention may have immunosuppressive, inotropic, cardiant, controlled to and hypotensive activities. The invention also comprises antibodies to ZMMPO-1 proteins which can be used to detect ZMMPO proteins and may be used to regulate the function of the protein. The sequences of the invention may be used for modulating cellular proliferation and differentiation, and for diagnostic purposes. The polypeptides can be used to treat immunological, reproductive, cardiac, haematopoietic disorders, leukemains, and hypertension. The present sequence represents a human ZMMPO-1 gene specific primer used in chromosomal mapping of the ZMMPO-1 gene specific primer used in Example 3; Col 57; 40pp; English. 

Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; 0; Mismatches 867 CCTCCTTGCTCCAGT 15 Local Similarity 86.7 nes 13; Conservative 853 CGTCCTGGCTCCAGT Query Match gg

RESULT

695/c AAD40695 standard; DNA; 18

AAD40695;

(first entry) 30-0CT-2002

Mouse alpha-fetoprotein gene specific sense PCR primer.

Mouse; stem cell differentiation; drug identification; gene expression; organ regeneration; alpha-fetoprotein; PCR primer; ss.

WO200245506-A1.

13-JUN-2002.

26-OCT-2001; 2001WO-US050987.

26-OCT-2000; 2000US-0243549P.

(UYFL ) UNIV FLORIDA

Hamazaki T; Terada N,

WPI; 2002-519632/55.

The invention relates to a method for identifying drug candidate for promoting tissue-specific differentiation of stem cell. The method involves contacting culture of stem cells with library of test substances and analysing cells for increased tissue-specific gene expression. The method is useful for identifying drugs for regeneration of lost or damaged organs. The present sequence is mouse alpha-fetoprotein gene specific PCR primer, used to illustrate the method of the invention Identifying drug candidate for promoting tissue-specific differentiation of stem cell, comprises contacting culture of stem cells with library of test substances and analyzing cells for increased tissue-specific gene Example 2; Page 30; 36pp; English. expression 

Sequence 18 BP; 5 A; 4 C; 5 G; 4 T; 0 U; 0 Other;

; 0 Gaps . 0 Indels 4.1%; Score 11.8; DB 1; 86.7%; Pred. No. 6.8e+02; tive 0; Mismatches 2; 875 13; Conservative 861 CTCCAGTTGGAACAC 17 crccrcrcrcaaarac Query Match Best Local Similarity Matches 8

RESULT 857 AAS16214

AAS16214 standard; DNA; 18

BP.

AAS16214;

18-JUN-2002 (first entry)

Human ZTMPO-1 PCR primer ZC15486

ZTMPO-1; human; neurological disease; chromosome 12q24.3; Alzheimer's disease; ZC15486; PCR primer; ss.

Homo sapiens.

°,

Gaps

. 0

2; Indels

WO200177393-A2

18-OCT-2001

23-JAN-2001; 2001WO-US002177.

10-APR-2000; 2000US-00546358.

(ZYMO ) ZYMOGENETICS INC.

Sheppard PO; Whitmore TE,

WPI; 2002-017474/02.

for sequence or ZTMPO-1 polynucleotide sequence or ZTMPO-1 polypeptide, diagnosing a neurological disease e.g., Alzheimer's disease. Use of probes or primers derived from human ZTMPO-1 polynucleotide

Example 1; Page 32; 32pp; English.

This sequence represents the human ZTMPO-1 specific PCR primer ZC15486 used to map the location of the ZTMPO-1 gene to chromosome 12q24.3 in the invention. The method of the invention comprises determining the presence of an alteration in the nucleic acid sequence of a polynucleotide encoding the ZTMPO-1 protein. Primers or probes derived from the human ZTMPO-1 polynucleotide sequence or protein sequence can be used for diagnosing neurological disease or a susceptibility to a neurological disease e.g. Alzheimer's disease. ZTMPO-1 probes and primers can also be used to detect and to localise ZTMPO-1 gene expression in tissue samples. ZTMPO-1 gene probes can also be used to detect aberrations and alterations e.g. aneuploidy, gene copy number changes, restriction site changes and rearrangements. The ZTMFO-1 genes and probes comprising ZTMFO-1 DNA can also be used to determine if the ZTMFO-1 gene is present on chromosome 12 or if there is a chromosomal structural abnormality associated with that region. The ZTMFO-1 polypeptides and polynucleotides may be used within diagnostic systems to detect ZTMFO-1 polypeptides or ZTMPO-1 polynucleotides in biological sample and which serves as a diagnostic tool for diseases that are associated with altered levels of ZTMPO-1 polynucleotides or polypeptides 

Sequence 18 BP; 4 A; 7 C; 2 G; 5 T; 0 U; 0 Other;

Gaps ; 0 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels 13; Conservative Local Similarity Query Match Matches

. 0

853 CGTCCTGGCTCCAGT 867

ò

Mon Jul 12 11:21:14 2004

1 CCTCCTTGCTCCAGT 15

g

ABI82208;

```
ABI82208 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       874 ACTITCCTGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTITCCCAAGAIGC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-454420/48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vely F,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         functional KARAP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200224940-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Unidentified
                                                                                                                                                                                           10-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Vivier E,
                                                                                                                               AAD38462;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 859
RESULT 858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AB182208
                                    AAD38462
                                                                                                                                  SON COURT OF COURT OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
```

```
Human, K-ras, PCR primer; probe, capture probe; mutation detection; ligase detection reaction; LDR; p53; BRCA1; BRCA2; infectious disease; infection; 21 hydroxylase deficiency; Turner Syndrome, obesity; cancer; oncogene; tumour suppressor; human papillomavirus; forensic; environmental monitoring; food industry; feed industry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Designing capture oligonucleotide probes for use on a support to which complementary oligonucleotides hybridize with little mismatch.
                                                                                       p53 mutation detection primer/probe #87.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 3; Page 65; 300pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CORR ) CORNELL RES FOUND INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-APR-2000; 2000US-0197271P.
                                                                                                                                                                                                                                                                                                                                                                                                                     04-APR-2001; 2001WO-US010958.
                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-034366/04.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zirvi M,
                                                                                                                                                                                                                                                                                                                                WO200179548-A2.
                                                                                                                                                                                                                                                                    sapiens.
                                           15-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                           25-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Barany F,
                                                                                                                                                                                                                                                                                         Synthetic
                                                                                                                                                                                                                                                                    Ношо
The present invention relates to a novel method for identifying compounds capable of inhibiting KAR-associated protein (KARAP)-transduced immune signals. The method involves using functional and non-functional KARAP, cells co-expressing functional KARAP, functional receptors transducing their signal by zeta, gamma or epsilon and engineered cells and animals over-expressing functional KARAP, functional KARAP. The method is useful for identifying compounds capable of inhibiting KARAP. The method is useful for identifying compounds capable of inhibiting KARAP. The impairing the development and maturation of dendritic cells, by synthesis inhibition or through inhibition of the migration of dendritic cells, for maxing drugs intended for inhibiting dendritic cells, by synthesis inhibition or through inhibiting dendritic cells, by synthesis can analysis intended for inhibiting dendritic cells, by synthesis of immine response, where the activation of KAR has to be inhibited and contact sensitivity or multiple solerosis. The present DNA sequence is KARAP/DARIS specific reverse transcription
                                                                                                                                                                                                                                                                                    KAR-associated protein, KARAP-transduced immune signal, dendritic cell, antigen presentation; contact sensitivity, multiple sclerosis; neuroprotective; reverse transcription; RT-PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying KAR-associated protein-transduced immune signal inhibitor, comprises using cells co-expressing functional KARAP, and engineered cells and animals that over-express functional KARAP or bear non-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Seguence 18 BP; 5 A; 6 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.8; DB 1;
Pred. No. 6.8e+02;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
                                                                                                                                                                                                                                               KARAP/DAP12 specific forward RT-PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 1; Page 20; 89pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tomasello E;
                                                                                                                AAD38462 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-SEP-2001; 2001WO-EP011492.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-SEP-2000; 2000US-0234161P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.18;
                                                                                                                                                                                                   (first entry)
```

Kliman R;

Favis R,

Gerry NP,

```
The present invention describes a method (M1) for designing capture oligonucleotide probes (I) for use on a support to which complementary cligonucleotide probes (II) will hybridise with little mismatch, where (I) have melting temperatures within a narrow range. The method is useful for detecting infectious diseases caused by bacterial infectious agents of a samonella. Listeria monocytogenes and Hamophilus influenza, fungal infectious agents concerning temigautus, viruses e.g. T-cell lymphocytotrophis cirus, hepsergillus fumigautus, viruses e.g. T-cell lymphocytotrophis cirus, selected from Onchoverva volvulus, Entamoba histolytica and Dracunculus medinesis. The method is also useful for detecting genetic diseases such as 21 hydroxylase deficiency, Turner Syndrome and obesity defects. Detecting cancer involving oncogenes, tumour suppressor genes, or genes involved in DNA amplification, replication, recombination or repair, the cancer is specifically associated with a gene selected from BRCAI gene, p53 gene, human papillomavirus types 16 and 18 and liver cancers. The method is also used for environmental monitoring, forensics and the food and feed industry, detecting comprises scanning (using e.g. a scanning electron microscope and infrared microscope) the support at the electron and correlating (using a computer) identified production to a sets occurred and correlating (using a computer) identified to a sets occurred and correlating (using a computer) identified to a computer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          presence or absence of the target nucleotide sequences. ABI82074 to ABI97546 represent oligonucleotide sequences used in the exemplification
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18 BP; 2 A; 6 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        776 TGAGGCCAGCCCTC 790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          regececkececric 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABL61451 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 86.7
nes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABL61451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          П
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          엄
```

; 0

Gaps ;

2; Indels

ö

(first entry)

```
Ob; human; obese; adiposity; body weight; anorectic; anabolic; PCR; primer; chromosome 7; STS; sequence tagged site; 7q31.3; microsatellite marker; ss.
                             Human Ob gene STS sWSS2367 AFMa345wc9 PCR primer #1.
                                                                                                                                            (UYRQ ) UNIV ROCKEFELLER
                                                                                                                                                                      WPI; 2002-412914/44.
                                                                  Homo sapiens.
                                                                               US6350730-B1.
                 16-OCT-2002
                                                                                                        07-JUN-1995;
                                                                                                                          30-NOV-1994;
10-MAY-1995;
                                                                                                                                                         Friedman JM,
                                                                                                                    17-AUG-1994;
                                                                                            26-FEB-2002
     ABL61451;
                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                       Matches
```

Proenca R;

Zhang Y,

94US-00392345. 94US-00347563. 95US-00438431.

95US-00488223.

ó Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds. Gaps Human eosinophil major basic protein antisense fragment no.1653. 0; 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels BP. 855 TCCTGGCTCCAGTTG 869 llarity 86.7%; Conservative rccredcrrcArrrd 18 ABZ95789 standard; DNA; 18 (first entry) Local Similarity es 13; Conserv 17-0CT-2003 ABZ95789; ABZ95789/6
XX
AC ABZ99
XX
AC ABZ99
DY 17-00
XX
KW Human
KW ARL:
KW ARC:
CON ARC
CON AR d

Modifying the body weight of an animal comprises administering an obese gene (OB) polypeptide analog. Example 10; Col 79-80; 152pp; English.

This invention describes a novel method of modifying the body weight of an animal comprising administering an obese gene (OB) polypeptide analogue, capable of modulating body weight and adiposity. The invention has anorectic and anabolic activity, AB161415-AB161468 represent PCR primers used in the detection of sequence tagged sites (STS's) and microsatellite markers used in the mapping of the human ob gene onto chromosome 7. These genetic markers represent an important tool for studying the possible role of the Ob gene in inherited forms of human

Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;

RESULT 861

Homo sapiens

The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the intiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or neasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, conse in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignant disease or condition, also antiinflammatory steroid in a subject, for reducing or depleting levels of continiflammatory steroid in a subject, for reducing levels of adenosine receptor, producing bronchodilation, increasing levels of ubiquinone or lung surfactant in a subject, stissue, or treating bronchoconstriction, lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed section in the printed or the control or the control or the control or the printed or the control or the control or the control or the printed or the control Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or Pabalan J, Aguilar D; Sequence 18 BP; 0 A; 6 C; 4 G; 8 T; 0 U; 0 Other; Disclosure; SEQ ID NO 11031; 872pp; English. at ftp.wipo.int/pub/published pct_sequences Katz E, Sandrasagra A, Ka L, Shahabuddin S; 23-APR-2002; 2002WO-US013135. 24-APR-2001; 2001US-0286137P. (EPIG-) EPIGENESIS PHARM INC Li Y, Sar Tang L, WPI; 2003-229219/22. WO200285308-A2 31-OCT-2002 Nyce JW, L Miller S, ubiquinone Query Match 

Gaps 0; 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; tive 0; Mismatches 2; Indels 13; Conservative Best Local Similarity Matches 13; Conserv

ö

ò

Human major basic protein antisense fragment no.1513. 17-OCT-2003 (first entry) ABZ95649;

BP.

ABZ95649 standard; DNA; 18

RESULT 862 ABZ95649/c

Human; antisense; lung dysfunction; nasal airway dysfunction; antiinflammatory steroid; ubiquinone; antiinflammatory; antiallergic; antiasthmatic; hypotensive; immunosuppressive; cytostatic; gene therapy; antisense gene therapy; respiratory; lung; adenosine sensitivity; adenosine receptor; bronchodilation; bronchoconstriction; lung allergy; lung inflammation; respiratory disease; ds.

sapiens. Homo

```
The invention relates to a novel pharmaceutical composition, which has a first active agent comprising an oligonucleotide antisense to the initiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or nasal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallargic, antiasthmatic, hypotensive, immunosuppressive, and cytostatic activity. The composition may have a use an antisense gene therapy. The composition is seful for treating or preventing a respiratory, lung or maligiant disease or condition, also for enhancing the prophylactic or therapeutic respiratory effect of an antiinflammatory steroid in a subject, for reducing levels of adenosine receptor, producing bronchodilation, increasing levels of adenosine receptor, producing bronchodilation, increasing levels of ung surfactant in a subject's tissue, or treating bronchoostriction, increasing levels of subjection.
                                                                                                                                                                                                                                                                                                                                                               Pharmaceutical composition for treating ailments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lung inflammation, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 10891; 872pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                     Li Y, Sandrasagra A, Ka
Tang L, Shahabuddin S;
                                                                                                                 23-APR-2002; 2002WO-US013135.
                                                                                                                                                          24-APR-2001; 2001US-0286137P.
                                                                                                                                                                                                          (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                      WPI; 2003-229219/22.
                     WO200285308-A2.
                                                                   31-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                            ubiquinone
                                                                                                                                                                                                                                                                           Miller S,
                                                                                                                                                                                                                                                        Nyce JW,
```

Gaps . 0 Score 11.8; DB 1; Length 18; Pred. No. 6.8e+02; 0; Mismatches 2; Indels Sequence 18 BP; 0 A; 6 C; 4 G; 8 T; 0 U; 0 Other; / Match 4.1%; Local Similarity 86.7%; Conservative 13; Query Match Matches

0;

949 GCAAGAAGAGCCAAA 963 16 GCAACAAGAGCGAAA 2 ò g

ABX12630 standard; DNA; 18 14-MAY-2003 ABX12630; ABX12630/ 

RESULT 863

BP.

Alpha-fetoprotein (AFP) reverse transcriptase PCR primer #1.

(first entry)

Hepatic cell specific gene expression; cell therapy; hormone; cytokine; homozygous stem cell; homozygous post-meiosis I diploid germ cell; cocytes fusion; spermatid fusion; progenitor cell production; lens cell; differentiated cell production; tissue production; cell differentiation; cell regulating factor; keratinising epithelial cell; ciliated cell; epithelial cell; contractile cell; neuron; blood cell; immune system cell; sensory transducer; pigment cell; Als; germ cell; nurse cell; supporting cells of sense organ; glial cell;

embryonic germ layer cell; Parkinson's disease; Huntington's disease; Alzheimer's disease; amyotrophic lateral sclerosis; spinal cord defect; injury; multiple sclerosis; muscular dystrophy, cystic fibrosis; liver disease; diabetes; heart disease; cartilage defect; injury; burn; foot ulcer; vascular disease; urinary tract disease; AIDS; cancer; alpha-fetoprotein; AFP; reverse transcriptase PCR; RT-PCR; primer; ss. ж Ж Khanna Lei J, Lin H, Nguyen M, 30-NOV-2001; 2001US-00997240. 30-NOV-2000; 2000US-0253943P WPI; 2003-310950/30. Yan WL, Huang SC, YAN W L. HUANG S C. NGUYEN M. (KHAN/) KHANNA R. US2002168763-A1. 14-NOV-2002. (YANW/) HUAN/) (NGUY/) LINH/) (LEIJ/) Mus sp. 

Pabalan J, Aguilar D;

Katz E,

Novel homozygous stem cell useful for making desired progenitor cells, differentiated cells, group of differentiated cells, and tissue types.

Example 3b; Page 26; 49pp; English.

The invention describes an isolated homozygous stem cell (HS). HS is derived by producing a mitotically activated homozygous post-meiosis I derived by producing a mitotically activated homozygous post-meiosis I complete a blastocyst-like mass. HS is useful for making a desired mass of the blastocyst-like mass. HS is useful for making a desired composition of progenitor cell, differentiated cell, group of differentiated cells, or tissue type, by inducing HS to differentiate under suitable conditions. The differentiation is accomplished by the inclusion of a cell regulating factor, hormone or cytokine in the culture medium. The desired cells or group of cells is keratinising epithelial cells, epithelial absorptive cells of the gut, exocrine glands, urogenital tract, epithelial absorptive cells of the lining the lung, gut, exocrine glands, or urogenital tract or as a barrier, and epithelial cells lining closed internal body cavities, ciliated cells with propulsive function, contractile cells, cells of the blood and immune system, sensory transducers, autonomic neurons, supporting cells of sense organs and of peripheral neurons, and neurons or glial cells of sense organs and of peripheral neurons, cells, germ cells, and nurse cells, or one of the embryonic germ layers comprising the ectoderm, endoderm or mesoderm. Progenitor cells are useful in a therapy to treat a disease or condition selected from the parkinson's, Huntington's, Alzheimer's, amyotrophic lateral sclerosis cartinge defects or injuries, burns, foot ulcers, vascular disease, conjurance transcription or transcription or transcription or transcription. reverse transcriptase PCR primer used to analyse hepatic cell specific gene expression while studying the differentiation of HS cells into

Gaps . Query Match
Best Local Similarity 86.7%; Pred. No. 6.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels Sequence 18 BP; 5 A; 4 C; 5 G; 4 T; 0 U; 0 Other; 861 CTCCAGTTGGAACAC 875 ò

17 CICCIGITGGAATAC 3

ö

```
ACA75493 standard; DNA; 18 BP
                                                                  07-JUL-2003
                                  ACA75493;
```

(first entry)

Human WSX receptor -20nt antisense oligonucleotide.

neuroprotective; immunosuppressive; dermatological; anti-HIV; probe; antiinflammatory; anorectic; antidabetic; cytostatic; antitumour; cytokine receptor; proliferation; differentiation; hamatopoietic cell; anaemia; thrombocytopaenia; hypoplasia; myelodysplasia; HIV induced ITP; disseminated intravascular coagulation; immune thrombocytopaenic purpura; inflammatory condition; iron deficiency; obesity; diabetes; mature blood cell lineage; chemotherapy; radiation therapy; bone marrow transplantation; metabolic disorder; anorexia; steroid-induced truncalobesity; stem cell tumour; tumour. Human; ss; WSX receptor; antianaemic; haemostatic; anticoagulant;

Homo sapiens.

US2003004109-A1.

02-JAN-2003

06-AUG-2002; 2002US-00214802

96US-0064855P. 97US-00780562 08-JAN-1996; 08-JAN-1997;

(BENN/) BENNETT B. (MATT/) MATTHEWS W.

Bennett B, Matthews W;

Novel isolated cytokine receptor, termed WSX receptor, useful for treating diseases characterized by a decrease in hematopoietic cells e.g. anemia, or for treating myeloproliferative thrombocytotic diseases. WPI; 2003-416605/39

Example 8; Fig 7; 77pp; English.

The invention relates to an isolated cytokine receptor which plays a role in enhancing proliferation and/or differentiation of haematopoietic cells, termed Wax receptor comprising the amino acid sequence of mature human WSX receptor variant 13.2 or its extracellular domain. The WSX receptor is useful for identifying a molecule which binds to and/or activates the WSX receptor, as a diagnostic tool for measuring serum certivates the WSX igand, for treating diseases characterised by a decrease in hematopoietic cells (such as anaemia, thrombocytopaenia, hypoplasia, disseminated intravascular coagulation, myelodypalasia, immune (autoimmune) thrombocytopaenic purpura (ITP) and HIV induced ITP), immune (autoimmune) thrombocytopaenic purpura (ITP) and HIV induced ITP), complement, conditions and in iron deficiency, obselty or diabetes, for enhancing repopulation of mature blood cell lineages in cells having undergone chemo- or radiation therapy or bone marrow transplantation therapy, or for promotring kidney, liver and lung growth and/or repair. The WSX receptor is useful for producing anti-WSX receptor antibodies, for affinity purification of WSX ligand, for competitive screening of potential agonists or anagonists for binding to the WSX receptor and WSX leadlowment, e.g., in malignancies, or as standards or controls in assays for WSX receptor. A composition comprising the WSX polypeptide is useful development, e.g., in malignancies, or as standards or controls in assays for WSX receptor. A composition comprising the WSX polypeptide is useful development, e.g., in malignancies, or as standards or controls in assays for was an anaegonist for reducing activation of endogenous which expetor, and contract metabolic disorders (e.g. annorexia or steroid-induced controls in assays to treat metabolic disorders (e.g. annorexia or steroid-induced controls in assays receptor. The present sequence represents a human WSX receptor probe used receptor. The present sequence as an anaemia of the world and the present sequence as an an ACA75493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA775493/ACA7754

```
Gaps
                                                                                                          0;
                                                                     4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ve 0; Mismatches 2; Indels
                                  Seguence 18 BP; 7 A; 4 C; 3 G; 4 T; 0 U; 0 Other;
in an antisense inhibition assay
                                                                                                                                           834 TITICITCICAAG 848
                                                                                      86.7%;
                                                                                                                                                                            reracricicidade 3
                                                                                      Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                          17
                                                                     Query Match
                                                                                                                                           ò
                                                                                                                                                                          g
```

0

ACA75494 standard; DNA; 18 BP

ACA75494;

07-JUL-2003 (first entry)

Human WSX receptor -20nt sense oligonucleotide.

Human; ss; WSX receptor; antianaemic; haemostatic; anticoagulant; nucleorogulant; antianaemic; manuscuppressive; dermatological; anti-HIV; probe; antilnflammatory; anorectic; antidiabetic; cytostatic; antitumour; cytokine receptor; proliferation; differentiation; haemacopoiecic cell; anaemia; thrombocytopaenia; hypoplasia; myelodysplasia; HIV induced ITP; disseminated intravascular coagulation; immune thrombocytopaenic purpura; ITP; myeloproliferative thrombocytocic disease, thrombocytopaenic purpura; inflammatory condition; iron deficiency; obesity; diabetes; mature blood cell lineage; chemotherapy; radiation therapy; bone marrow transplantation; metabolic disorder; anorexia; steroid-induced truncalobesity; stem cell tumour; tumour.

Homo sapiens.

US2003004109-A1.

02-JAN-2003

06-AUG-2002; 2002US-00214802.

96US-0064855P. 97US-00780562. 08-JAN-1996; 08-JAN-1997;

(BENN/) BENNETT B. (MATT/) MATTHEWS W.

Bennett B, Matthews W;

WPI; 2003-416605/39.

Novel isolated cytokine receptor, termed WSX receptor, useful for treating diseases characterized by a decrease in hematopoietic cells e.g. anemia, or for treating myeloproliferative thrombocytotic diseases.

Example 8; Fig 7; 77pp; English.

The invention relates to an isolated cytokine receptor which plays a role in enhancing proliferation and/or differentiation of haematopoietic calls, termed Wax receptor comprising the amino acid sequence of mature human Wax receptor variant 13.2 or its extracellular domain. The Wax receptor is useful for identifying a molecule which binds to and/or activates the Wax receptor, as a diagnostic tool for measuring serum of levels of endogenous Wax ligand, for treating diseases characterised by a cerease in hematopoietic cells (such as anaemia, thrombocytopaenia, hypoplasia, disseminated intravascular coagulation, myelodysplasia, immune cautoimmune) thrombocytopic purpura (ITP) and HIV induced ITP), coapulation in iron deficiency, obseity or diabetes, for inflammatory conditions and in iron deficiency, obseity or diabetes, for enhancing repopulation of mature blood cell lineages in cells having undergone chemo- or radiation therapy or bone marrow transplantation

therapy, or for promoting kidney, liver and lung growth and/or repair. The MSX receptor is useful for producing anti-MSX receptor antibodies, for affinity purification of WSX ligand, for competitive screening of potential agoniets or antagonists for binding to the WSX receptor, as molecular weight markers, as reagents for mechanism studies of the WSX receptor or its ligands, to study the role of the WSX receptor and WSX ligand in normal growth and development, as well as abnormal growth and development, as well as abnormal growth and development, as standards or controls in assays for WSX receptor. A composition comprising the WSX polypeptide is useful as an antagonist for reducing activation of endogenous Wsx receptor, and to read metabolic disorders (e.g. anorexis or steroid-induced truncalobesity), stem cell tumours and other tumours which express WSX receptor. The present sequence represents a human WSX receptor probe used Sequence 18 BP; 4 A; 3 C; 4 G; 7 T; 0 U; 0 Other; in an antisense inhibition assay \$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$\$

4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels 13; Conservative Local Similarity Query Match Matches

834 TTTTCTTCTGAAG 848 TGTACTTCTCTGAAG 16 0 à g

ACF62868 standard; DNA; 18 BP.

RESULT 867

.

Gaps

0;

셤

ð

ACF62868

ACF62868;

Human oestrogen receptor PCR primer SEQ ID NO:115. ACF62866 standard; DNA; 18 BP. (first entry) 09~OCT-2003 ACF62866; ACF62866/ RESULT 

Human; colon cancer; oestrogen receptor; myoglobin; p21; p27; p16; p53; progesterone receptor; pcna; CEA; cdc2; c-erbB2; methylation; CpG; characterisation; classification; diagnosis; differentiation; colon cell proliferative disorder; PCR primer; ss.

sapiens Synthetic Ношо

WO2003014388-A2.

20-FEB-2003.

09-AUG-2002; 2002WO-EP008939.

09-AUG-2001; 2001DE-01039283.

(EPIG-) EPIGENOMICS AG.

Taubert Mode1 Distler J,

WPI; 2003-256600/25.

The present invention describes a method for determining the methylation status of CpG dinucleotides within the genes for oestrogen receptor, p21, p27, p16, progesterone receptor, myoglobin, pcna, cdc2, c-ers2, p53 and/or CBA, which comprises contacting the target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides, and detormining from the methylation status of the CpG dinucleotides, the presence of a colon cancer. A set of oligomers or peptide nucleic acid (PNA)-oligomers can be used as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNP) useful in the genomic sequences, oligonucleotides and/or PNA-oligomers, useful in characterization, grading, staging and/or diagnosis of colon cancer. Determining methylation status of CpG dinucleotides using modified Claim 26; Page 140; 219pp; English.

```
.
0
of a corresponding genomic DNA by analysis of a chemically pretreated genomic DNA. The pretreated genomic DNA is useful for the determination of the methylation status of a corresponding genomic DNA and/or detection of SNPs. The methods and pretreated genomic DNA are also useful for the characterisation, classification, diagnosis and differentiation of colon cell proliferative disorders. ACF62752 to ACF63278 represent sequences
                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                              DB 1; Length 18;
                                                                                                                                                                                                                                                                                                           4.1%; Score 11.8; DB 1; Length 1
86.7%; Pred. No. 6.8e+02;
ive 0; Mismatches 2; Indels
                                                                                                                                                                                      used in the exemplification of the present invention
                                                                                                                                                                                                                                               BP; 6 A; 0 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                   916 TIATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               m
                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17 TTATCATCACTACTA
                                                                                                                                                                                                                                                                                                                                           Local Similarity
les 13; Conserv
                                                                                                                                                                                                                                                      Sequence 18
                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                 Best Loc
Matches
```

Human; colon cancer; oestrogen receptor; myoglobin; p21; p27; p16; p53; progesterone receptor; pona; CEA; cdc2; c-erbB2; methylation; CpG; characterisation; classification; diagnosis; differentiation; colon cell proliferative disorder; PCR primer; ss. Human oestrogen receptor PCR primer SEQ ID NO:117. (first entry) WO2003014388-A2. Homo sapiens. 09-OCT-2003 20-FEB-2003 Synthetic. 

09-AUG-2002; 2002WO-EP008939. 09-AUG-2001; 2001DE-01039283.

Taubert H; (EPIG-) EPIGENOMICS AG Model F, Distler J,

WPI; 2003-256600/25.

Determining methylation status of CpG dinucleotides using modified genomic sequences, oligonucleotides and/or PNA-oligomers, useful in the characterization, grading, staging and/or diagnosis of colon cancer.

Claim 26; Page 140; 219pp; English.

The present invention describes a method for determining the methylation status of CpG dinucleotides within the genes for oestrogen receptor, p21, p27, p16, progesterone receptor, myoglobin, pona, cdc2, c-ersle. p53 and/or CEA, which comprises contacting the target nucleic acid with a reagent that distinguishes between methylated and non-methylated CpG dinucleotides, and determining from the methylation status of the CpG contacting the presence of a colon cancer. A set of oligomers or peptide nucleic acid (PNA)-oligomers can be used as probes for determining the cytosine methylation state and/or single nucleotide polymorphisms (SNP) cof a corresponding genomic DNA by analysis of a chemically pretreated genomic DNA is useful for the determination of the methylation status of a corresponding genomic DNA and/or detection of SNPs. The methods and pretreated genomic DNA are also useful for the characterisation, classification, diagnosis and differentiation of colon cell proliferative disorders. ACF62752 to ACF63278 represent sequences

ò

Gaps

```
The invention relates to a method for producing homozygous stem cells, comprising isolating homozygous stem cells from the inner cell of a blastocyst-like mass into an animal host to create a stemplasm, which is cultured in vitro to derive homozygous stem cell lines. The method is useful for producing isolated homozygous stem cells, which are also useful for producing isolated homozygous stem cells, which are also useful for diagnosing or treating diseases, e.g. genetic diseases, neurodegenerative diseases (such as Alzheimer's disease or multiple sclerosis), endocrine-related disorders, cancers, diabetes, liver diseases, heart diseases, or immune defects. The concers, diabetes, liver diseases, heart diseases, or immune defects. The transplantation, gene therapy, cell replacement therapy or in treating transplantation, gene therapy, cell replacement, spinal cord injury or burns).

These cells are useful for generating cells, masses of cells, tissues or organs for transplantation. This sequence represents an RT-PCR primer used to amplify mouse alpha-fetoprotein (AFP) DNA, used in the scope of
Sequence 18 BP; 7 A; 5 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                               Mouse alpha-fetoprotein (AFP) RT-PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 3; Page 28; 49pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nguyen M,
                                                                                            930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-JUN-2002; 2002US-00179959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-NOV-2000; 2000US-0253943P.
30-NOV-2001; 2001US-00997240.
                                                                                                                      2 Trarcarcacracra 16
                                                                                                                                                                                                    ACD26355 standard; DNA; 18
                                                                                                                                                                                                                                                               (first entry)
                      Query Match
Best Local Similarity 86.7°
Matches 13, Conservative
                                                                                         916 TTATCATCACCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-492038/58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (YANW/) YAN W L.
(HUAN/) HUANG S C.
(NGUY/) NGUYEN M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Huang SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 into animal hosts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        JINGQI L.
KHANNA R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003027331-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LIN H.
                                                                                                                                                                                                                                                               09-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-FEB-2003.
                                                                                                                                                                                                                                  ACD26355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (LINH/)
(JING/)
(KHAN/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Yan WL,
                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus sp.
                                                                                                                                                                                  à
                                                                                                                     dd
```

```
The invention relates to a method of generating tailor-made pluripotent stem cells having a desired genome, in which the MHC (major histocompatibility) antigens are reduced or absent. This sequence represents a primer used in the method of the invention. The invention also includes methods for the preparation of the pluripotent stem cells, by producing modified stem cells in which the MHC antigens are reduced or absent, then fusing the cells with reprogrammed somatic cells having the desired genome, and removing the genomic material originating from the stem cells. The tailor-made pluripotent stem cells may be used in the production of cells, tissues and organs for transplantarion to treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Immunosuppressive, ss, primer, pluripotent stem cell, transplantation, major histocompatibility antigen; immune rejection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              disease conditions in the recipient, without inducing immune rejection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tailor-made pluripotent stem cells for production of donor organs and tissues which do not induce immune rejection when transplanted.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                         Pluripotent stem cell generation method control gene primer AFP #1.
                                                                                                                       ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ·:
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; tive 0; Mismatches 2; Indels
                                                                               Length 18;
                                                                                                                       Indels
                                                                           Score 11.8; DB 1;
Pred. No. 6.8e+02;
0; Mismatches 2;
                                       Sequence 18 BP; 5 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 18 BP; 5 A; 4 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 2; Page 92; 172pp; Japanese.
                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tada M;
                                                                                                                                                                 875
                                                                               4.1%;
86.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-SEP-2001; 2001JP-00290005.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-SEP-2002; 2002WO-JP009732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         861 CTCCAGTTGGAACAC 875
                                                                                                                                                                                                                                                                               ACC80565/c
ID ACC80565 standard; DNA; 18
                                                                                                                                                                                                  17 CTCCTGTTGGAATAC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17 crecrerredanae 3
                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                         Query Match
Best Local Similarity 86.7'
Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 13; Conservative
                                                                                                                                                            861 CTCCAGTTGGAACAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (TRAN-) TRANS-SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nakatsuji N, Tada T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAKATSUJI N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-313639/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO2003027278-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TADA/) TADA T.
the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                    28-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       03-APR-2003
                                                                                                                                                                                                                                                                                                                                            ACC80565;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAKA/)
                                                                                                                                                                                                                                                                 RESULT 869
SXS
                                                                                                                                                                                                  Ωp
                                                                                                                                                                                                                                                                                                                                          q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Homozygous stem cell; blastocyst; stemplasm; neurodegenerative disease, genetic disease; Alzheimer's disease; multiple sclerosis; diabetes; burn; endocrine-related disorder; cancer; liver disease; heart disease; primer; immune defect; transplantation; limb replacement; spinal cord injury; ss; RT-PCR; mouse; alpha-fetoprotein; neuroprotective; nootropic; vulnerary; antidiabetic; hepatotropic; cardiant; cytostatic; immunomodulator; AFP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Producing homozygous stem cells for transplantation or cell replacement therapy, by isolating homozygous stem cells from a blastocyst-like mass or from a stemplasm created by transplanting the blastocyst-like mass
                                                                                                  Gaps
                                                                                                  ;
0
                                                          Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Khanna R;
                                                                                                2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jingqi L,
                                                      4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 6.8e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lin H,
```

0

RESULT 870

```
0;
                                                                                                                                                                                                                                                                                                                                                                                              The invention describes an OB (obese) polypeptide (also referred as leptin) (1), capable of modulating body weight, comprising amino acids 1.67 of a human or mouse OB polypeptide sequence of 167 amino acids (S1), given in the specification, or amino acids 22 - 166 a human or mouse OB polypeptide sequence of 166 amino acids (S2), given in the specification. The OB polypeptide is useful for reducing body weight in conditions of obesity, and as a target for neutralising antibodies which results in weight gain (protein therapy), for treating weight loss associated with cancer, acquired immunodeficiency syndrome (AIDS) or anorexia nervosa. This sequence represents a primer associated with the isolation of the human obese (ob) or leptin gene
                                                                                            OB polypeptide; obese polypeptide; leptin; body weight; obesity; weight gain; protein therapy; weight loss; cancer; AIDS; human; acquired immunodeficiency syndrome; anorexia nervosa; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                  New human or mouse OB polypeptide, also referred to as leptin polypeptide, which is capable of modulating body weight, useful for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel human secreted and transmembrane protein related primer #141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; secreted and transmembrane protein; PRO; angiogenesis; endothelial cell proliferation; wound healing; immune response; T-lymphocytes proliferation; neonatal heart hypertrophy; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 18 BP; 3 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                         (ob) gene associated PCR primer #37.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                             Example 10; Col 79-80; 153pp; English.
                                                                                                                                                                                                                                                                                           Proenca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACD68568 standard; DNA; 18 BP
           ABX96437 standard; DNA; 18 BP.
                                                                                                                                                                                                      95US-00488225.
                                                                                                                                                                                                                           94US-00292345.
                                                                                                                                                                                                                                     94US-00347563.
95US-00438431.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            855 TCCIGGCICCAGITG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTGGCTTCATTTG 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13; Conservative
                                                                                                                                                                                                                                                                      (UYRQ ) UNIV ROCKEFELLER
                                                                                                                                                                                                                                                                                           Zhang Y,
                                                                                                                                                                                                                                                                                                              WPI; 2003-298093/29.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                            polypeptide, whic treating obesity.
                                                                                                                                                             US6471956-B1.
                                                                                                                                         Homo sapiens
                                                                                                                                                                                                      07-JUN-1995;
                                                                                                                                                                                                                           17-AUG-1994;
                                                                                                                                                                                                                                                                                           Friedman JM,
                                                                           Human obese
                                                                                                                                                                                                                                      30-NOV-1994;
                                                                                                                                                                                                                                                10-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-SEP-2003
                                                      13-MAY-2003
                                                                                                                                                                                  29-OCT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACD68568;
                                 ABX96437;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
  ABX96437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
```

```
vascular endothelial growth factor-stimulated proliferation; mammalian kidney mesangial cell proliferation; Berger disease; nephropathy; Schanlein-Henoch purpura, celiac disease; Crohn's disease; dermatitis herpetifornis; diabetes; haemoglobin switch; insulinaemia; panoreatic beta-cell precursor cell differentiation; thalassemias; obesity; auditory hair cell regeneration; hearing loss; bone disorder; cartilage disorder; sports injury; arthritis; PCR; primer; ss
cardiac insufficiency disorder; calcium flux; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9805-0100390P
9805-0100584P
9805-0100661P
9805-0100662P
9805-0100664P
9805-0100664P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0100684P
98US-0100710P
98US-0100919P
98US-0100930P
98US-0100849P
98US-0100849P
98US-010104P
98US-010104P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0101915P.
98US-0101916P.
98US-0102207P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0099602P.
98US-0099642P.
98US-0099741P.
98US-0099754P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0099812P.
98US-0099815P.
98US-0099816P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0101279P.
98US-0101471P.
98US-0101472P.
                                                                                                                                                                                                                                                                                                                                                                                                98US-0099536P.
98US-0099596P.
98US-0099598P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0099763P.
98US-0099792P.
98US-0099808P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0101474P.
98US-0101475P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0101476P.
98US-0101477P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0100385P.
98US-0100388P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0101479P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0101738P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0101741P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0102240P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0102307P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0102330P
                                                                                                                                                                                                                                                                                                 98US-0098723P
                                                                                                                                                                                                                                                                                                                                98US-0098750P.
                                                                                                                                                                                                                                                                                                                                                                 98US-0098821P.
                                                                                                                                                                                                                                                  2001US-00015869
                                                                                                                                                                                                                                                                                 98US-0098716P
                                                                                                                                                                                    US2003073130-A1.
                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                  11-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                               02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-SEP-1998;
17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-SEP-1998;
                                                                                                                                                                                                                   17-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                   09-SEP-1998
09-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-SEP-1
```

98US-0102331P.

```
98US-0106030P-98US-0106032P-98US-0106138P-98US-0106178P-98US-0106178P-98US-0106178P-98US-0106178P-98US-0106178P-98US-0106178P-98US-0106132P-98US-0106178P-98US-0108778P-98US-0108778P-98US-0108778P-98US-0108778P-98US-0108778P-98US-0108778P-98US-0108778P-98US-0108778P-98US-0108778P-98US-010878P-98US-0108878P-98US-0108807P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108867P-98US-0108848P-98US-0108851P-98US-0108851P-98US-0108852P-98US-0108852P-98US-0108852P-98US-0108852P-98US-0108852P-98US-0108852P-98US-0108852P-98US-0108852P-98US-0108852P-98US-0108852P-98US-0108852P-98US-0108852P-98US-0108852P-
           98US-0102487P.
98US-0102571P.
98US-0102684P.
98US-0102687P.
98US-0102687P.
98US-0103258P.
                                                                                                                                                                          98US-0103679P.
98US-0103711P.
98US-0104257P.
                                                                                                                                                                                                                            98US-0105002P.
98US-0105104P.
98US-0105169P.
98US-0105693P.
98US-0105693P.
98US-0105807P.
98US-0105881P.
98US-0105882P.
98US-0106022P.
                                                                                          98US-0103314P.
98US-0103315P.
98US-0103328P.
98US-0103395P.
                                                                                                                                  98US-0103396P.
98US-0103401P.
98US-0103633P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0113296P.
98US-0114223P.
99WO-US000106.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99US-0129674P.
99US-0141037P.
99US-0144758P.
99US-0145698P.
                                                                                                                                                                                                         98US-0104987P.
                                                                                                                                                                 98US-0103678P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0108858P.
98US-0108904P.
30-SEP-1998,
30-SEP-1998,
30-SEP-1998,
01-0CT-1998,
02-0CT-1998,
06-0CT-1998,
07-0CT-1998,
07-0CT-1998,
07-0CT-1998,
07-0CT-1998,
07-0CT-1998,
07-0CT-1998,
07-0CT-1998,
08-0CT-1998,
                                                                                                                                                                                                                                                        22-0CT-1998;
26-0CT-1998;
26-0CT-1998;
27-0CT-1998;
27-0CT-1998;
27-0CT-1998;
28-0CT-1998;
                                                                                                                                                                                                                           20-OCT-1998;
21-OCT-1998;
22-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                            28-OCT-1998;
28-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                28-OCT-1998;
29-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                        28-OCT-1998
                                                                                                                                                                                                                                                                                                                                                    28-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                     29-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                              29-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                         30-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                  03-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                             03-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-NOV-1998
03-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-NOV-1998
```

```
Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S; oddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; toni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Leptin receptor; WSX receptor; metabolic disorder; ITP; ss; antisense; anorexia; steroid-induced truncalobesity; stem cell tumour; DIC; anaemia; thrombocytopaenia; hypoplasia; myelodysplasia; HIV-induced ITP; disseminated intravascular coagulation; immune thrombocytopaenic purpura; myelopyorliferative thrombocytotic disease; thrombocytosis; inflammatory condition; iron deficiency; diabetes; renal failure; haematopoietic cell proliferation; bone marrow transplantation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel isolated PRO polypeptides e.g. PRO1130, PRO1275, PRO1418, PRO1555, PRO1787 that modulate glucose or free fatty acid uptake by skeletal muscle cells, and are useful for treating diabetes, hyper- or hypo-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human WSX receptor antisense oligonucleotide for position -20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; tive 0; Mismatches 2; Indels
                                                                99WO-US030095.
2000WO-US000219.
2000WO-US00376.
2000WO-US003565.
2000WO-US004342.
                                                                                                                                                                                                                                                         2000WO-US030952.
2000WO-US030873.
2000WO-US032678.
2001WO-US006520.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACH66800 standard; DNA; 18 BP
                                       99WO-US028313
99WO-US028551
                                                                                                                                  2000WO-US005004
2000WO-US005841
                                                                                                                                                             2000WO-US006884.
2000WO-US013705.
                                                                                                                                                                                                                              2000WO-US023522
2000WO-US023328
                                                                                                                                                                                                                                                                                                                                       2001WO-US019692
2001WO-US021066
2001WO-US021735
                                                                                                                                                                                                                                                                                                               2001WO-US006666
2001WO-US017800
                                                                                                                                                                                         2000WO-US014042
                                                                                                                                                                                                    2000WO-US014941
                                                                                                                                                                                                                    2000WO-US015264
                                                                                                                                                                                                                                                                                                                                                                                2001US-00946374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      788 CICIGGIGCCAAGAG 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gao W, Goddard A, Godowsk
Pan J, Paoni NF, Roy MA,
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 86.73
Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                         (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-585293/55.
                                                                                                                                                                                                                                                                                                             01-MAR-2001; 2
01-JUN-2001; 2
20-JUN-2001; 2
29-JUN-2001; 2
09-JUL-2001; 2
         15-SEP-1999;
29-OCT-1999;
20-NOV-1999;
20-NOV-1999;
16-DEC-1999;
16-JAN-2000;
11-FEB-2000;
11-FEB-2000;
22-FEB-2000;
11-MAK-2000;
11-MAK-2000;
11-MAK-2000;
22-MAY-2000;
                                                                                                                                                                                                   30-MAY-2000;
02-JUN-2000;
23-AUG-2000;
24-AUG-2000;
                                                                                                                                                                                                                                                         08-NOV-2000;
10-NOV-2000;
01-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                               04-SEP-2001;
                                                                                                                                                                                                                                                                                                28-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          insulinemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                    Baker KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACH66800;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACH66800
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

ö

Homo sapiens

08-JAN-1997; 08-JAN-1996;

Bennett B,

US6541604-B1 01-APR-2003

```
The invention relates to an isolated leptin/WSX receptor comprising a sequence of mature human WSX receptor variant 12.1. Also disclosed are the 13.2 and 6.4 WSX receptor variants (and DNA molecules encoding all 3 proteins), a partial mouse WSX receptor and its encoding DNA sequence. The WSX receptor is useful for preparing a composition for treating diseases mediated by WSX receptor, especially diseases characterised by a decrease in haematopoletic cells, e.g., ansemina; thrombocytopaenia, thrombocytopaenia, chypoplasia, disseminated intravascular coagulation (DIC), mypelodysplasia, humone (autoimmune) thrombocytopaenic purpura (ITP), and HIV induced ITP. The WSX receptor is also useful for treating metabolic disorders such as concexia, obesity (e.g. steroid-induced truncalobasity) tumours such as stem cell tumours, inflammatory conditions, iron deficiency, diabetes, can cell tumours, inflammatory conditions, iron deficiency, diabetes, cand failure, conditions related to haematopoietic cell proliferation (such as in bone marrow transplantation and for promoting kidney, lung and liver growth and/or repair. An experiment was performed to show antiense inhibition of human and mouse WSX receptors. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; ss; PCR; secreted protein; transmembrane protein; PRO; vulnerary; cardiant; antidiabetic; anorectic; antiarthritic; angiogenesis; cancer; atomatic capilitary; endothelial cell growth; wound healing; stimulated T-lymphocyte proliferation; immune response suppression; neonatal heart hypertrophy; cardiac insufficiency disorder; endothelial growth factor; inflammation; mononuclear cell; essinophil; diabetes; obesity; or hyper-insulinaemia; hypo-insulinaemia; chondrocyte redifferentiation; bone disorder; cartilage disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human secreted/transmembrane protein PRO1780 Tagman PCR primer #1.
                                                                                                                                                                                                                                        New WSX receptor, useful for preparing a composition for treating diseases mediated by WSX receptor e.g., diabetes or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 18 BP; 7 A; 4 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sports injury; arthritis; primer
                                                                                                                                                                                                                                                                                                                            Example 8; Fig 7; 142pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACH04670 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0098716P.
98US-0098723P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-DEC-2001; 2001US-00006856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              834 TTTTCTTCTCAAG 848
                       96US-0064855P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 reractricrerand 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-OCT-2003 (first entry)
                                                                                                                                     Matthews W;
                                                                              (GETH ) GENENTECH INC.
                                                                                                                                                                                         WPI; 2003-539731/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JS2003044841-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 01-SEP-1998;
01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                          08-JAN-1996;
                                                                                                                                     Sennett B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACH04670;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 874
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACH04670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an isolated leptin/WSX receptor comprising a sequence of mature human WSX receptor variant 12.1. Also disclosed are sequence of mature human WSX receptor variant 12.1. Also disclosed are the 13.2 and 6.4 WSX receptor variants (and DNA molecules encoding all 3 proteins), a partial mouse WSX receptor and its encoding DNA sequence. The WSX receptor is useful for preparing a composition for treating diseases mediated by WSX receptor, especially diseases characterised by a decrease in haematopoietic cells, e.g., namemia, thrombocytopaenia, thrombocytopaenia, thrombocytopaenia, thrombocytopaenia to mumune (autoimmune) thrombocytopaenic purpura (ITP), and HIV induced ITP. The WSX receptor is also useful for treating metabolic disorders such as anorexia, obesity (e.g. steroid-induced truncalobesity) tumours such as stem cell tumours, inflammatory conditions, iron deficiency, diabetes, tenal failure, conditions related to haematopoietic cell proliferation cy such as in bone marrow transplantation and for promoting kidney, lung and liver growth and/or repair. An experiment was performed to show antisense inhibition of human and mouse WSX receptors. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Leptin receptor; WSX receptor; metabolic disorder; ITP; ss; anorexia; steroid-induced truncalobesity; stem cell tumour; tumour; DIC; anaemia; thrombocytopaenia; hypoplasia; myelodysplasia; HIV-induced ITP; disseminated intravascular coagulation; immune thrombocytopaenic purpura; myeloproliferative thrombocytotic disease; thrombocytosis; inflammatory condition; iron deficiency; diabetes; renal failure; haematopoietic cell proliferation; bone marrow transplantation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                               New WSX receptor, useful for preparing a composition for treating diseases mediated by WSX receptor e.g., diabetes or obesity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 11.8; DB 1; Length 18;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human WSX receptor sense oligonucleotide for position -20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 18 BP; 4 A; 3 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 8; Fig 7; 142pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACH66799 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-00780562.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     834 TTTTCTTCTCAAG 848
                                                                                                                       97US-00780562
                                                                                                                                                                           96US-0064855P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 reractrororand 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 86.73
Matches 13; Conservative
                                                                                                                                                                                                                                                                                         Matthews W;
                                                                                                                                                                                                                                     (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                              WPI; 2003-539731/51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-JAN-1997;
```

Homo sapiens US6541604-B1

ACH66799;

RESULT 873 ACH66799/

à g

.; 0

Gaps

0;

01-SEP-1998   98US-0098749P.   02-SEP-1998   98US-0098750P.   02-SEP-1998   98US-0098812P.   03-SEP-1998   98US-0098812P.   03-SEP-1998   98US-0099812P.   03-SEP-1998   98US-0099536P.   03-SEP-1998   98US-0099536P.   04-SEP-1998   98US-0099536P.   05-SEP-1998   98US-0099536P.   05-SEP-1998   98US-0099732P.   05-SEP-1998   98US-0099732P.   05-SEP-1998   98US-0099732P.   05-SEP-1998   98US-0099732P.   06-SEP-1998   98US-0099732P.   06-SEP-1998   98US-0099732P.   06-SEP-1998   98US-0100384P.   06-SEP-1998   98US-0100384P.   06-SEP-1998   98US-0100384P.   06-SEP-1998   98US-0100349P.   06-SEP-1998   98US-0100349P.   06-SEP-1998   98US-0100349P.   06-SEP-1998   98US-0100349P.   06-SEP-1998   98US-010044P.   06-SEP-1998   98US-010344P.   06-SEP-1998   98US-010334P.   06-SEP-1998   98US-0103334P.   06-SEP-1998				
01 - SEP - 1998 02 - SEP - 1998 03 - SEP - 1998 04 - SEP - 1998 05 - SEP - 1998 06 - SEP - 1998 07 - SEP - 1998 08 - SEP - 1998 09 - SEP - 1998 09 - SEP - 1998 09 - SEP - 1998 10 - SEP - 1998 10 - SEP - 1998 11 - SEP - 1998 12 - SEP - 1998 13 - SEP - 1998 14 - SEP - 1998 15 - SEP - 1998 16 - SEP - 1998 17 - SEP - 1998 18 - SEP - 1998 19 - SEP - 1998 19 - SEP - 1998 10 - SEP - 1998 10 - SEP - 1998 11 - SEP - 1998 12 - SEP - 1998 13 - SEP - 1998 14 - SEP - 1998 16 - SEP - 1998 17 - SEP - 1998 18 - SEP - 1998 18 - SEP - 1998 19 - SEP - 1998 19 - SEP - 1998 10 - SEP - 1998 10 - SEP - 1998 11 - SEP - 1998 12 - SEP - 1998 13 - SEP - 1998 14 - SEP - 1998 15 - SEP - 1998 16 - SEP - 1998 17 - SEP - 1998 18 - SEP - 1998 19 - SEP - 1998 19 - SEP - 1998 10 - SEP - 199	8US-00987499 8US-0098750 8US-00988211 8US-00988431 8US-0099536 8US-0099536 8US-00995411 8US-00997411 8US-00997411 8US-00997411 8US-00997411	605 - 000998121 605 - 00098151 605 - 00098151 605 - 00098151 605 - 0000381 605 - 0000381 605 - 00006611 605 - 00006611 605 - 00006611 605 - 00006811 605 - 00007111 605 - 00009191 605 - 000091 605 - 000091 605 - 000091 605 - 000091 605 - 000091 605 - 000091 605 - 00009	103 - 0101471P 103 - 0101472P 103 - 0101472P 104 - 0101476P 105 - 0101476P 105 - 0101478P 105 - 0101478P 105 - 010148P 105 - 010168P 105 - 010168P 105 - 010168P 105 - 010168P 105 - 0102168P 105 - 0102307P 105 - 01023	UNS-0102570P UNS-0102571P UNS-0102684P UNS-0102965P UNS-0103128P UNS-010331LP UNS-010331SP UNS-0103395P UNS-0103395P UNS-0103395P UNS-0103678P
	01-SEP-1999 02-SEP-1999 02-SEP-1999 02-SEP-1999 09-SEP-1999 09-SEP-1999 09-SEP-1999 09-SEP-1999 09-SEP-1999 10-SEP-1999	10 - SEP - 1996 10 - SEP - 1996 15 - SEP - 1996 15 - SEP - 1996 16 - SEP - 1996 16 - SEP - 1996 16 - SEP - 1996 17 - SEP - 1998 17 - SEP - 1998 18 - SEP - 1998	23 - SEP - 1998 24 - SEP - 1998 25 - SEP - 1998 26 - SEP - 1998 27 - SEP - 1998 28 - SEP - 1998 28 - SEP - 1998 29 - SEP - 1998 29 - SEP - 1998 20 - SEP - 1998 20 - SEP - 1998 20 - SEP - 1998	3.0-SRP-1998 3.0-SRP-1998 01-0CT-1998 06-0CT-1998 06-0CT-1998 07-0CT-1998 07-0CT-1998 07-0CT-1998 07-0CT-1998 07-0CT-1998

8US - 01037, 8US - 01042, 8US - 01043, 8US - 01050, 8US - 01051, 8US - 01051, 8US - 01052, 8US - 01056, 8US - 01056, 8US - 01058, 8US - 01058, 8US - 01058, 8US - 01058,	BUS - 0106028 BUS - 0106031 BUS - 0106031 BUS - 0106178 BUS - 0106218 BUS - 0106246 BUS - 0106464 BUS - 0106464 BUS - 0106466 BUS - 0106466 BUS - 0106902 BUS - 0106902 BUS - 0106902 BUS - 0106902 BUS - 0106903 BUS - 0106932 BUS - 0106933 BUS - 01069603	98US-U1088428P. 98US-U108843P. 98US-0108843P. 98US-0108850P. 98US-0108852P. 98US-0108858P. 98US-0108858P. 98US-0113296P. 98US-0113296P. 99US-0114723P. 99US-0144723P. 99US-0144758P. 99US-0144758P. 99US-014508P. 99US-014508P. 99US-014508P. 99US-014508P. 99US-014037P. 99WO-US021111. 99WO-US021111. 99WO-US021111. 99WO-US028551. 99WO-US0308551. 2000WO-US0308551. 2000WO-US0308551. 2000WO-US0308551. 2000WO-US0308561. 2000WO-US0308641. 2000WO-US030841. 2000WO-US008841. 2000WO-US01366. 2000WO-US008441. 2000WO-US01366. 2000WO-US01366.
8 - OCT - 199 0 - OCT - 199 0 - OCT - 199 0 - OCT - 199 1 - OCT - 199 5 - OCT - 199 7 - OCT - 199 7 - OCT - 199 8 - OC	B - OCT - 195 B	NOV-1998 NOV-1999 NOV-1998 NOV
	张 K K K K K K K K K K K K K K K K K K K	# # # # # # # # # # # # # # # # # # #

```
98US-0102331P.
98US-0102484P.
98US-0102571P.
98US-0102684P.
98US-0102684P.
98US-0102684P.
98US-0102684P.
98US-01031449P.
98US-01031328P.
98US-01031328P.
98US-0103138F.
98US-0103138F.
98US-0103139F.
98US-0103139F.
98US-0103139F.
98US-0103678P.
9805-0099808P.
9805-0099812P.
9805-0099816P.
9805-0100385P.
9805-0100386P.
9805-0100386P.
9805-0100662P.
9805-0100662P.
9805-0100663P.
9805-0100664P.
9805-0100664P.
9805-0100648P.
9805-010044P.
9805-0100449P.
9805-0100449P.
9805-0100449P.
9805-0100449P.
9805-0100449P.
9805-0100449P.
9805-0101478P.
9805-01014778P.
9805-01014778P.
9805-01014778P.
9805-01014778P.
9805-01014778P.
9805-01014778P.
9805-01014778P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-0CT-1998;
08-0CT-1998;
08-0CT-1998;
20-0CT-1998;
20-0CT-1998;
20-0CT-1998;
21-0CT-1998;
22-0CT-1998;
22-0CT-1998;
22-0CT-1998;
26-0CT-1998;
                                                                                                                                                                                                                   18-SEP-1998

18-SEP-1998

22-SEP-1998

23-SEP-1998

23-SEP-1998

23-SEP-1998

23-SEP-1998

24-SEP-1998

24-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-OCT-1998;
07-OCT-1998;
07-OCT-1998;
          10-SEP-1998;
10-SEP-1998;
10-SEP-1998;
15-SEP-1998;
15-SEP-1998;
16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
16-SEP-1998;
17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-OCT-1998;
06-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                       29-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                      29-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                 29-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                             29-SEP-1998;
  ö
                                                                                                                                                 Ferrara N, Fong S;
Gurney AL, Hillan KJ;
A, Tumas D, Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; secreted and transmembrane protein; PRO; gene therapy; vaccine; tissue typing; chromosome identification; vaccine; PCR; primer; ss.
                                                                                                                                                                                                                       Novel secreted and transmembrane polypeptides and polynucleotides encoding them useful for treating various cardiac insufficiency disorders, bone and/or cartilage disorders such as sports injuries and arthritis.
                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel human secreted and transmembrane protein related primer #141.
                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                                                                                                                    4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                  Baker KP, Botstein D, Desnoyers L, Eaton DL, Fe
Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gu.
Pan J, Paoni NF, Roy MA, Smith V, Stewart TA,
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0098716P.
98US-009873P.
98US-0098749P.
98US-00988750P.
98US-0098831P.
98US-0098841P.
98US-0099536P.
98US-0099536P.
98US-0099536P.
98US-0099536P.
98US-0099536P.
                08.NOV-2000; 2000WO-US030952.

10-NOV-2000; 2000WO-US030873.

10-NOV-2000; 2000WO-US032678.

28-FEB-2001; 2001WO-US006650.

01-MAR-2001; 2001WO-US00666.

01-JUN-2001; 2001WO-US011800.

29-JUN-2001; 2001WO-US021066.

09-JUN-2001; 2001WO-US021066.

09-JUN-2001; 2001WO-US021735.

04-SEP-2001; 2001US-00946374.
                                                                                                                                                                                                                                                                                                                                                                                                      ACD68214 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-SEP-2001; 2001US-00946374
                                                                                                                                                                                                                                                                                                                                 CTCTGGTGCCAAGAG 802
        2000WO-US023328
                                                                                                                                                                                                                                                                                                                                              CTCTGGTGCCCACAG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-2003 (first entry)
                                                                                                                                                                                                                                                                                                             13; Conservative
                                                                                                                                  (GETH ) GENENTECH INC.
                                                                                                                                                                                                        WPI; 2003-492259/46.
                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US2003073129-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
02-SEP-1998;
02-SEP-1998;
03-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-SEP-1998;
09-SEP-1998;
09-SEP-1998;
10-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-APR-2003.
        24-AUG-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                             ACD68214;
                                                                                                                                                                                                                                                                                                                                  788
                                                                                                                                                                                                                                                                                                                                                                                     RESULT 875
                                                                                                                                                                                                                                                                                                                                                                                                 ACD68214
                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                      g
```

```
98US-0106023P

98US-0106032P

98US-0106032P

98US-0106033P

98US-0106248P

98US-0106344P

98US-010634P

98US-010634P

98US-0106913P

98US-0106913P

98US-0106913P

98US-0106913P

98US-0106913P

98US-0106913P

98US-0106913P

98US-010881P

98US-0108862P

98US-0108848P

98US-0108851P

98US-0108851P
                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US020111.
99WO-US021194.
99US-00403297.
                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US030095.
2000WO-US000219.
2000WO-US000376.
2000WO-US003565.
                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US028313.
99WO-US028551.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000WO-US006884.
2000WO-US013705.
2000WO-US014042.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000WO-US004342.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-US005004.
2000WO-US005841.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US014941.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000WO-US015264.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-US023522.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000WO-US030952.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2000WO-US030873.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000WO-US032678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US021066.
2001WO-US021735.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000WO-US023328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US006520
                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JAN-2000;
06-JAN-2000;
11-FEB-2000;
24-FEB-2000;
02-MAR-2000;
15-MAY-2000;
22-MAY-2000;
28-OCT-1998,
28-OCT-1998,
28-OCT-1998,
28-OCT-1998,
28-OCT-1998,
29-OCT-1998,
30-OCT-1998,
30-OCT-1998,
31-NOV-1998,
03-NOV-1998,
03-NOV-1998,
03-NOV-1998,
03-NOV-1998,
                                                                                                                                              10-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-AUG-2000;
08-NOV-2000;
10-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-JUN-2001;
20-JUN-2001;
29-JUN-2001;
09-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-MAY-2000;
02-JUN-2000;
23-AUG-2000;
                                                                                                                                                                                                             17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-FEB-2001;
                                                                                                                                                                                                                                         17-NOV-1998;
                                                                                                                                                                                                                                                 18-NOV-1998
                                                                                                                                                                                                                                                           18-NOV-1998;
                                                                                                                                                                                                                                                                   18-NOV-1998
                                                                                                                                                                                                                                                                            18-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                                                                                                                               NOV-1998;
                                                                                                                                                                                                                                                                                                       18-NOV-1998;
                                                                                                                                                                                                                                                                                                                  22-DEC-1998;
                                                                                                                                                                                                                                                                                                                                            05-JAN-1999;
                                                                                                                                                                                                                                                                                                                                                              16-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                            15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                   30-DEC-1998
                                                                                                                                                                                                                                                                                                                                                      12-APR-1999
                                                                                                                                                                                                                                                                                                                                                                        23-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                  01-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                      02-DEC-1999,
                                                                                                                                                                                                                                                                                                                                                                                                                                              16-DEC-1999
```

```
Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S; Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ; Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK; Williams PM, Wood WI;
                                                                                                                                            Novel isolated PRO polypeptides e.g. PRO1491 and PRO1571, useful in the preparation of a medicament for treating a condition responsive to PRO polypeptide, and as therapeutic agents e.g. vaccines.
                                                                                                                                                                                                                                  The invention describes an isolated PRO (secreted and transmembrane) polypeptide (I), having at least 80% sequence identity to a sequence selected from any one of the 123 amino acid sequences given in
                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NOV; cytostatic; metabolic disorder; immune; neurodegenerative; circulatory; haemopoietic; wasting; cancer; gene therapy; vaccine; transgenic; human; ss; PCR; primer.
                                                                                                                                                                                                                                                                                                                              ..
                                                                                                                                                                                                                                                                                           Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NOV protein-related reverse PCR primer SEQ ID 210.
                                                                                                                                                                                                         Example 143; Page 288; 561pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-JUL-2001, 2001US-0304502P.
13-JUL-2001, 2001US-0305262P.
15-JUL-2001, 2001US-0305062P.
17-JUL-2001, 2001US-0306085P.
27-JUL-2001, 2001US-0306085P.
27-JUL-2001, 2001US-030828P.
30-JUL-2001, 2001US-03082FP.
17-AUG-2001, 2001US-03083FP.
12-SEP-2001, 2001US-031338P.
12-SEP-2001, 2001US-031338P.
21-SEP-2001, 2001US-031338P.
21-SEP-2001, 2001US-032396P.
04-JAN-2002, 2002US-034503BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP
                                                                                                                                                                                                                                                                                                                                                     788 CTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001US-0303828P.
2001US-0304016P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001US-0303046P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-FEB-2002; 2002US-0361172P.
01-MAR-2002; 2002US-0360814P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2002US-0360830P.
2002US-0361133P.
2002US-0361147P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            03-JUL-2002; 2002WO-US021361
                                                                                                                                                                                                                                                                                                                                                                                 1 crcredreccacae 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADC26385 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
             GETH ) GENENTECH INC.
                                                                                                                 WPI; 2003-585292/55.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO2003004687-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         05-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-JUL-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16-JAN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADC26385;
                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 876
                                                                                                                                                                                                                                                                                                                                                                                                                                               ADC26385
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
```

ö

WPI; 2003-513742/48.

```
.
                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to a novel isolated NOV polypeptide. The polypeptide of the invention demonstrates cytostatic activity and may be used for determining the presence of, or predisposition to a disease associated with altered levels of expression of the polypeptide, including metabolic disorders, immune disorders, neurodegenerative disorders, circulatory diseases, haemopoletic disorders, wasting diseases and cancer. The polypeptide may also be utilised during gene therapy procedures, vaccine development and transgenic animal production. The current sequence is that of the PCR primer of the invention which was
                                                                                                                                                                                                                                                                                                    New isolated NOVX polypeptide, useful for determining the presence of, or predisposition to a disease associated with altered levels of expression of the polypeptide, and for treating or preventing cancer.
                                                                                                                                                                            Gorman L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          spore wall protein 1; spore wall protein 2; protozoacide; vaccine; immune response; microsporidia; microsporidiosis; SWP1; SWP2; ds.
                                                                                                                                             Burgess CE, Casman Su;
Ellerman K, Gerlach V, Gorm
L, Malyankar UM, Miller CE;
EA, Rastelli L, Shenoy S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E. intestinalis spore wall protein gene fragment SEQ ID NO:80.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 11.8; DB 1; Length 18;
Pred. No. 6.8e+02;
0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 18 BP; 4 A; 7 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                         Example C; SEQ ID NO 210; 478pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (USSH ) US DEPT HEALTH & HUMAN SERVICES
                                                                                                                                                        Anderson DW, Berghs C, Boldog FL, Bu
Catterton E, Edinger S, Eisen AJ, El
Guo X, Jeffers M, Kekuda R, Li L, M
Padigaru M, Patturajan M, Pena CEA, I
Shimkets RA, Spaderna SK, Spytek KA,
Vernet CAM, Voss EZ, Zhong M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
           02-APR-2002; 2002US-0363637P.
12-APR-2002; 2002US-0372326P.
16-APR-2002; 2002US-0372990P.
19-APR-2002; 2002US-0373881P.
19-APR-2002; 2002US-0373821P.
02-JUL-2002; 2002US-0373921P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      used to analyse human NOV DNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Encephalitozoon intestinalis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            04-DEC-2001; 2001WO-US047182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        04-DEC-2001; 2001WO-US047182
2002US-0361677P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 cccaccacracic 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADC15721 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 86.7
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   713 CCCAGGAGAGTGACT
                                                                                                                              (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Nash TE
                                                                                                                                                                                                                                                                         WPI; 2003-221607/21.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO2003048299-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-JUN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hayman JR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADC15721;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADC157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
```

```
This invention relates to a novel method for detecting and differentiating between lung cell proliferative disorders associated with at least one gene and/or their regulatory regions. Specifically, it refers to a method comprising contacting a target nucleic acid in a biological sample with at least one reagent, wherein the reagent is able to distinguish between methylated and non-methylated CpG dinucleotides present in the target DNA. As such, it is possible to further
                                                                                                                                                     The invention relates to a novel isolated spore wall protein 1 and spore wall protein 2. A protein of the invention has protozoacide activity, and may be used as a vaccine. The spore wall proteins 1 and 2, nucleic acids encoding the proteins and the composition are useful for producing an immune response to microsporidia, or diagnosing, preventing and treating microsporidiosis in a subject. The present sequence represents a fragment of a spore wall protein gene of the invention.
                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide; adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer; cytosine methylation state.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Detecting and differentiating cytosine methylation state of genomic DNA, useful for diagnosing, treating prognosticating and/or monitoring lung cell proliferative disorders e.g. adenocarcinoma and squamous cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Primer oligo used for analysing CpG islands in genomic DNA (SeqID 852).
                                             New spore wall protein 1 and spore wall protein 2 of Encephalitozoon intestinalis, useful for producing an immune response to microsporidia, or diagnosing, preventing and treating microsporidiosis in a subject.
                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ŝ
                                                                                                                                                                                                                                                                                                                                                                           .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lipscher E, Maier
                                                                                                                                                                                                                                                                                                                                     4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                     Sequence 18 BP; 2 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Liloglou T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 15; SEQ ID NO 852; 58pp; English.
                                                                                                                         Claim 8; SEQ ID NO 80; 121pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Genc B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADC70362 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-DEC-2002; 2002WO-EP014026.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-DEC-2001; 2001DE-01061625
                                                                                                                                                                                                                                                                                                                                                                                                                 894 CTTCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                               13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   4 cricacaccririsc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Field JK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-533029/50.
                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2003052135-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-JUN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nimmrich I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Burger M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   carcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADC70362;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           878
                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                     qq
```

Sequence 18 BP; 6 A; 0 C; 5 G; 7 T; 0 U; 0 Other;

X S

ö

Gaps

```
PCR; primer; ss; lung cell proliferative disorder; CpG dinucleotide; adenocarcinoma; squamous cell carcinoma; cytostatic; probe; PNA-oligomer; cytosine methylation state.
          and squamous cell carcinoma, and their respective adjacent lung tissue. The present invention describes cytostatic oligomers and PNA-oligomers that are useful as probes for determining the cytosine methylation state or single nucleotide polymorphisms (SNPs) of the target sequence. This oligomucleotide sequence is a primer oligomer used for the analysis of CPG positions within genomic DNA, used in an exemplification of the
                                                                                                                                                                                                                                                                                                                                                        Primer oligo used for analysing CpG islands in genomic DNA (SeqID 853).
 differentiate and diagnose medical conditions including adenocarcinoma
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Field JK, Genc B, Liloglou T, Lipscher E, Maier S;
                                                                                                                                                                  ö
                                                                                                                                    4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; Live 0; Mismatches 2; Indels
                                                                                                            Sequence 18 BP; 6 A; 0 C; 5 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                             ADC70363 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            10-DEC-2002; 2002WO-EP014026.
                                                                                                                                                                                      TTATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14-DEC-2001; 2001DE-01061625
                                                                                                                                                                                                                Trarcarcacracra 2
                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                               Local Similarity 86.7
nes 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-533029/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003052135-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                  Unidentified.
                                                                                                                                                                                                                                                                                                                                18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-JUN-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Burger M, 1
Nimmrich I;
                                                                                       invention
                                                                                                                                                                                        916
                                                                                                                                                                                                                16
                                                                                                                                                                                                                                                                                                       ADC70363;
                                                                                                                                     Query Match
                                                                                                                                                                                                                                                       RESULT 879
                                                                                                                                                             Matches
8886666666666
                                                                                                                                                                                        à
```

Detecting and differentiating cytosine methylation state of genomic DNA, useful for diagnosing, treating prognosticating and/or monitoring lung cell proliferative disorders e.g. adenocarcinoma and squamous cell carcinoma.

Claim 15; SEQ ID NO 853; 58pp; English.

This invention relates to a novel method for detecting and differentiating between lung cell proliferative disorders associated with at least one gene and/or their regulatory regions. Specifically, it refers to a method comprising contacting a target nucleic acid in a biological sample with at least one reagent, wherein the reagent is able to distinguish between methylated and non-methylated CpG dinucleotides present in the target DNA. As such, it is possible to further differentiate and diagnose medical conditions including adenocarcinoma and squamous cell carcinoma, and their respective adjacent lung tissue. The present invention describes cytostatic oligomers and PNA-oligomers that are useful as probes for determining the cytosine methylation state or single nucleotide polymorphisms (SNPs) of the target sequence. This oligomucleotide sequence is a primer oligomer used for the analysis of CpG positions within genomic DNA, used in an exemplification of the invention

```
The invention relates to agonist antibodies which specifically bind to the human MSX receptor. The agonist antibodies are useful for activating the MSX receptor and for enhancing proliferation or differentiation of a cell comprising the WSX receptor, by exposing the cell to an antibody. The antibodies are also useful for reducing weight, specifically in the antibodies are also useful for reducing weight, specifically in the treatment of obesity, bulimia and other disorders associated with abnormal expression or functions of WSX receptor genes, for treating metabolic disorders such as diabetes, for reducing excessive levels of insulin in human patients and for treating patients suffering from food consumption and related pathological conditions such as type II adult onset diabetes, infertility, hypercholesterolaemia, hyperlipidaemia, cardiovascular diseases, arteriosclerosis, polycystic ovarian disease, osteoarthitis, dermatological disorders, insulin resistance, hypertriglyceridaemia, cancer, cholelithiasis and hypertension. The
                                          0
                                                                                                                                                                                                                                                                                                                                                                       Human; WSX receptor; ss; weight reduction; obesity; bulimia; metabolic disorder; diabetes; insulin level reduction; food consumption; type II adult onset diabetes; infertility; hypercholesterolaemia; hyperlipidaemia; cardiovascular disease; arteriosclerosis; polycystic ovarian disease; osteoarthritis; dermatological disorder; insulin resistance; hypertriglyceridaemia; cancer; cholelithiasis; hypertension; kidney ailment; lung dysfunction; emphysema; haemorrhage; anaemia; thrombocytopenia; hypoplasia; cachexia; anorexia; appetite loss;
                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Novel agonist antibody useful for activating WSX receptor and for enhancing proliferation or differentiation of a cell comprising WSX receptor, which specifically binds to the WSX receptor.
                                          ;
0
    Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rodrigues ML;
                                          Indels
                                                                                                                                                                                                                                                                                                                                      Human WSX receptor DNA antisense oligonucleotide #10.
    Score 11.8; DB 1;
Pred. No. 6.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matthews W,
                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 8; SEQ ID NO 33; 140pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kim KJ,
                                                                                                                                                                                                                    BP.
                                                                                 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96US-00667197.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-00779457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96US-00585005
Query Match
Best Local Similarity 86.7%;
Matches 13; Conservative
                                                                                                                                                                                                                    ADC08934 standard; DNA; 18
                                                                                                                    16 TTATCATCACTACTA 2
                                                                                                                                                                                                                                                                                               18-DEC-2003 (first entry)
                                                                             916 TTATCATCACCACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (CART/) CARTER P J.
(CHIA/) CHIANG N Y.
(KIMK,) KIM K J.
(MATT/) MATTHEWS W.
(RODR/) RODRIGUES M L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Chiang NY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-657237/62.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        tumour; antisense.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US2002193571-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-DEC-2002,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Carter PJ,
                                                                                                                                                                                                                                                          ADC08934;
                                                                                                                                                                               RESULT 880
                                                                                                                                                                                                 ADC08934/
                                                                                                                                                                                                                                      à
                                                                                                                  dd
```

```
·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hyperlipidaemia; cardiovascular disease; arteriosclerosis; polycystic ovarian disease; osteoarthritis; dermatological disorder; insulin resistance; hypertriglycertridaemia; cancer; chol-lithiasis; hypertension; kidney ailment; lung dysfunction; emphysema; haemorrhage; anaemia; thrombocytopenia; hypoplasia; cachexia; anorexia; appetite loss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to agonist antibodies which specifically bind to the human WSX receptor. The agonist antibodies are useful for activating the WSX receptor and for enhancing proliferation or differentiation of a cell comprising the WSX receptor, by exposing the cell to an antibody. The antibodies are also useful for reducing weight, specifically in the treatment of obesity, bulimia and other disorders associated with abnormal expression or functions of WSX receptor genes, for treating metabolic disorders such as diabetes, for reducing excessive levels of
antibodies are also useful for treating kidney ailments, lung dysfunctions such as emphysema, haemorrhages, diseases characterised by decrease in blood cells such as anaemia, thrombocytopenia, hypoplasia, metabolic disorders such as cachexia, anorexia and loss of appetite, other tumour related disorders. This sequence represents a human WSX receptor DNA antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; WSX receptor; ss; weight reduction; obesity; bulimia; metabolic disorder; diabetes; insulin level reduction; food consumption; type II adult onset diabetes; infertility; hypercholesterolaemia;
                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel agonist antibody useful for activating WSX receptor and for enhancing proliferation or differentiation of a cell comprising WSX receptor, which specifically binds to the WSX receptor.
                                                                                                                                                                                                     .
                                                                                                                                                           Score 11.8; DB 1; Length 18; Pred. No. 6.8e+02; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rodrigues ML;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human WSX receptor DNA antisense oligonucleotide #11.
                                                                                                                               Sequence 18 BP; 7 A; 4 C; 3 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matthews W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Example 8; SEQ ID NO 34; 140pp; English.
                                                                                                                                                  4.1%; SCOL
86.7%; Pred
0; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Kim KJ,
                                                                                                                                                                                                                                                                                                                                                                   ADC08935 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96US-00585005.
96US-00667197.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97US-00779457
                                                                                                                                                                                                                                         834 TITICITCICAAG 848
                                                                                                                                                                                                                                                                          reractrererass 3
                                                                                                                                                                                                                                                                                                                                                                                                                                        18-DEC-2003 (first entry)
                                                                                                                                                                                                     13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Carter PJ, Chiang NY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RODRIGUES M L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CARTER P J.
CHIANG N Y.
KIM K J.
MATTHEWS W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-657237/62.
                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tumour; antisense
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US2002193571-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-JAN-1996;
20-JUN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                      ADC08935;
                                                                                                                                                                                                                                                                          17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (CART/)
(CHIA/)
(KIMK/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RODR/)
                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                 RESULT 881
                                                                                                                                                                                                                                                                                                                                                    ADC08935
                                                                                                                                                                                                                                                                                                                                                                                                        ઠે
                                                                                                                                                                                                                                                                          g
     5555555X8
```

```
ö
insulin in human patients and for treating patients suffering from food consumption and related pathological conditions such as type II adult canset diabetes, infertility, hypercholesterolaemia, hyperlipidaemia, cardiovascular diseases, atterfosclerosis, polycystic ovarian disease, osteoarthritis, dermatological disorders, insulin resistance, hypertriglyceridaemia, cancer, cholelithiasis and hypertension. The antibodies are also useful for treating kidney allments, lung dysfunctions such as emphysema, haemorrhages, diseases characterised by metabolic disorders such as cancharia, anomania, hypoplasia, metabolic disorders such as cachexia, anorexia and loss of appetite, and other tumour related disorders. This sequence represents a human WSX
                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, PRO; PCR; ss; protein electrophoresis; chromosome mapping;
gene mapping; genetic disorder; primer.
                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                  4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                           Sequence 18 BP; 4 A; 3 C; 4 G; 7 T; 0 U; 0 Other;
                                                                                                                                                 receptor DNA antisense oligonucleotide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0098803P.
98US-0098821P.
98US-0098843P.
98US-009536P.
98US-0099596P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0099602P.
98US-0099642P.
98US-0099741P.
98US-0099754P.
98US-0099753P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0099808P.
98US-0099812P.
98US-0099815P.
98US-01003816P.
98US-0100388FP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0100390P.
98US-0100584P.
98US-0100627P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0098716P.
98US-0098723P.
98US-0098749P.
98US-0098750P.
                                                                                                                                                                                                                                                                                                                                                  ADC18322 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98US-0100661P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0100662P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001US-00013907
                                                                                                                                                                                                                                                         834 TITICITCIGAAG 848
                                                                                                                                                                                                                                                                                 rgractrororada 16
                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                             Human PRO PCR primer #138.
                                                                                                                                                                                                                                13; Conservative
                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US2003064925-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   02-SEP-1998;
02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
09-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-SEP-1998;
16-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                    18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-SEP-1998;
10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LO-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-APR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6-SEP-1998
                                                                                                                                                                                                                                                                                 ~
                                                                                                                                                                                                                                                                                                                                                                            ADC18322;
                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                          RESULT 882
                                                                                                                                                                                                                     Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                       ADC18322
                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                          $$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                          à
```

8US-0100683E 8US-0100564E 8US-01007110E 8US-0100919E 8US-0100919E 8US-0100919E 8US-01010148E 8US-010101471E 8US-0101471E	8US - 0101475P 8US - 0101476P 8US - 0101479P 8US - 0101741P 8US - 0101741P 8US - 010120 P 8US - 010220 P 8US - 010230 P 8US - 0102330 P 8US - 0102330 P 8US - 0102348P 8US - 0102348P 8US - 0102348P 8US - 0102348P 8US - 0102348P 8US - 0102313P 8US - 0103315P 8US - 0103315P 8US - 0103315P 8US - 0103315P 8US - 01033144P 8US - 0103314P 8US - 0103314P 8US - 0103315P 8US - 0103314P 8US - 0103314P 8US - 0103314P 8US - 0103314P 8US - 0103314P	980S-0103401P. 980S-0103431P. 980S-0103673P. 980S-0103711P. 980S-0104987P. 980S-0104987P. 980S-010500P. 980S-010500P. 980S-010500P. 980S-010508P. 980S-010569P. 980S-010569P. 980S-010603P.
7-SEP-1998 7-SEP-1998 7-SEP-1999 7-SEP-1998 7-SEP-1998 8-SEP-1998 8-SEP-1998 8-SEP-1998 8-SEP-1998 8-SEP-1998 3-SEP-1998	3. SEP-1998 3. SEP-1998 3. SEP-1998 4. SEP-1998 4. SEP-1998 4. SEP-1998 4. SEP-1998 5. SEP-1998 6. SEP-1998 6. SEP-1998 6. SEP-1998 6. SEP-1998 6. SEP-1998 6. SEP-1998 6. SEP-1998 6. SEP-1998 6. SEP-1998 7. CCT-1998 7. CCT-1998 7. CCT-1998	
P P P P P P P P P P P P P P P P P P P	######################################	***************************************

2000WO-USOOSB41. 2000WO-USOOSB41. 2000WO-USO114042. 2000WO-USO114041. 2000WO-USO114941. 2000WO-USO115264. 2000WO-USO13281. 2000WO-USO3328. 2000WO-USO3328. 2000WO-USO33678. 2001WO-USO3666. 2001WO-USOOSE6. 2001WO-USOOSE6. 98US - 0106919F 98US - 0106913F 98US - 0106934P 98US - 0107783F 98US - 0107783F 98US - 0108779F 98US - 0108779F 98US - 0108779F 98US - 0108867P 98US - 0108861P 98US - 0108861P 98US - 0108861P 98US - 0108861P 99US - 01423P 99US - 0144758P 99US - 0145698P 99US - 0146698P 90US - 014669B 90US - 01688B 90US 03-NOV-1998; 03-NOV-1998; 03-NOV-1998; 03-NOV-1998; 03-NOV-1998; 117-NOV-1998; 117-NOV-1998; 117-NOV-1998; 117-NOV-1998; 117-NOV-1998; 117-NOV-1998; 117-NOV-1998; 117-NOV-1998; 118-NOV-1998; 118-NOV-1999; 119-NOV-1999; 119-NOV 

(GETH ) GENENTECH INC.

Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S; Bood W, Goddard A, Goddwaki PJ, Grimaldi JC, Gurney AL, Hillan KJ; Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Watanabe CK; Williams PM, Wood WI;

WPI; 2003-555602/52.

Novel isolated PRO polypeptides e.g. PRO1491 and PRO1571, useful in the preparation of a medicament for treating a condition responsive to PRO polypeptide, and as therapeutic agents e.g. vaccines.

Example 143; SEQ ID NO 453; 555pp; English.

Mon Jul 12 11:21:14 2004

\$8888888

agents. The polynucleotides are useful as hybridisation probes for a cDNA The invention relates to human PRO polypeptides and the polynucleotides encoding them. The sequences are useful in the preparation of a medicament for treating a condition responsive to a PRO polypeptide. The polypeptides are useful in a number of functional biological assays, as molecular weight markers for protein electrophoresis and as therapeutic

.; 0 DB 1; Length 18; Indels 4.1%; Score 11.8; DB 1; 86.7%; Pred. No. 6.8e+02; ative 0; Mismatches 2. 788 CICIGGIGCCAAGAG 802 1 crcregrecccacae 15 13; Conservative Query Match Best Local Similarity Matches

à

ADC73361 standard; DNA; 18 BP ADC73361; RESULT 883 ADC73361/ 

Human endothelial derived gene-1 (EG-1) PCR primer #3. 01-JAN-2004 (first entry)

Human; ss; PCR; endothelial derived gene-1; BG-1; cytostatic; cardiant; cerebroprotective; antiangiogenic; angiogenesis; gene therapy; heart disease; stroke; cancer; endothelial cell proliferation; apoptosis; tube formation, primer

Homo sapiens.

US2003129597-A1.

10-JUL-2003.

.9-DEC-2001; 2001US-00029137.

19-DEC-2001; 2001US-00029137.

(REGC ) UNIV CALIFORNIA.

Nguyen MH;

WPI; 2003-829556/77.

New nucleic acid encoding a new human endothelial polypeptide designated EG-1, useful for diagnosing and treating angiogenesis-associated disease such as heart disease, stroke and cancer.

Claim 1; SEQ ID NO 9; 54pp; English.

The invention relates to an isolated nucleic acid comprising a nucleic acid sequence that specifically hybridises to a human endothelial-derived acid sequence that specifically hybridises to a human endothelial-derived gene-I (EG-I) cDNA or encodes a human EG-1 polypeptide. Also included are a polypeptide encoded by EG-1 whose expression is upregulated in an endothelial cell, a cell transfected with an EG-1 nucleic acid, an antibody that binds to EG-1 protein, screening for an agent that comprising a recombinantly modified EG-1 gene so that the gene does not transcribe a functional EG-1 protein, identifying a predisposition to comprising a recombinantly modified EG-1 gene so that the gene does not transcribe a functional EG-1 protein, identifying a predisposition to a comprising suppress of a disease characterised by abnormal anglogenesis and inhibiting anglogenesis comprising inhibiting expression or activity or an EG-1 gene product. The invention is used to diagnose and treat anglogenesis related disease such as heart disease, stroke and cancer. The effects of EG-1 inhibition using anti-EG-1 antibodies or EG-1 caused inhibition using anti-EG-1 antibodies against all these sequences were used. Interference with antibodies or Eg-1 action in endothelial migration and tube formation, assayed using standard techniques. The present sequence is a PGR primer

```
Gaps
                                                                                        ..
                                                        4.1%; Score 11.8; DB 1; Length 18; 36.7%; Pred. No. 6.8e+02; ved. No. 6.8e+02; ved. No. 6.8e+02; Indels
                           Sequence 18 BP; 3 A; 4 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                      0; Mismatches
                                                                        86.78;
                                                                                                                        841 CTCTGAAGACAGCGT 855
used to amplify EG-1 cDNA.
                                                                                         Conservative
                                                                                                                                                     17 crcrcaaccaaccr
                                                                      Local Similarity
nes 13; Conserv
                                                             Query Match
                                                                                           Matches
 S X 8
                                                                                                                                                     g
```

.

Human, ss, PCR, endothelial derived gene-1; EG-1; cytostatic; cardiant; Human endothelial derived gene-1 (EG-1) PCR primer #1. ADC73359 standard; DNA; 18 BP. (first entry) 01-JAN-2004 ADC73359;

RESULT 884 ADC73359/c

ö

Gaps

cerebroprotective, antiangiogenic; angiogenesis; gene therapy; heart disease; stroke; cancer; endothelial cell proliferation; apoptosis;

US2003129597-A1. Homo sapiens. 

tube formation; primer.

19-DEC-2001; 2001US-00029137.

10-JUL-2003.

19-DEC-2001; 2001US-00029137.

(REGC ) UNIV CALIFORNIA.

Nguyen MH;

WPI; 2003-829556/77.

New nucleic acid encoding a new human endothelial polypeptide designated EG-1, useful for diagnosing and treating angiogenesis-associated disease such as heart disease, stroke and cancer.

Claim 1; SEQ ID NO 7; 54pp; English.

The invention relates to an isolated nucleic acid comprising a nucleic acid sequence that specifically hybridises to a human endothelial-derived acid sequence that specifically hybridises to a human endothelial-derived appeared [EG-1] to TORA or encodes a human EG-1 polypeptide. Also included are a quothelial cell, a cell transfected with an EG-1 nucleic acid, an antibody that binds to EG-1 protein, screening for an agent that comprising a recombinantly modified EG-1 gene so that the gene does not comprising a recombinantly modified EG-1 gene so that the gene does not comprising a recombinantly modified EG-1 gene so that the gene does not cranscribe a functional EG-1 protein, identifying a predisposition to developing symptoms of a disease characterised by abnormal anglogenesis and inhibiting anglogenesis comprising inhibiting expression or activity or an EG-1 gene product. The invention is used to diagnose and treat anglogenesis related disease such as heart disease, stroke and cancer. The effects of EG-1 inhibition using anti-EG-1 antibodies or EG-1 The effects of EG-1 inhibition using anti-EG-1 antibodies or EG-1 peptides (ADC73363 - ADC73367) was examined. Antibodies or EG-1 Sequences were used. Interference with antibodies or peptide fragments sequences were used interference with antibodies or peptide fragments caused inhibition in endothelial call proliferation, increase in apoptosis, and inhibition of the present sequence is a PCR primer assayed using standard techniques. The present sequence is a PCR primer assayed using standard tecused to amplify EG-1 cDNA.

Sequence 18 BP; 3 A; 4 C; 6 G; 5 T; 0 U; 0 Other;

```
9805-0101471P

9805-0101472P

9805-0101476P

9805-0101477P

9805-0101478P

9805-0101478P

9805-0101478P

9805-0101418P

9805-0101311P

9805-0102540P

9805-0102540P

9805-0102540P

9805-0102570P

9805-0102564P

9805-0102564P

9805-0102567P

9805-0102568P

9805-0102568P

9805-0103411P

9805-0103418P

9805-0103418P

9805-010346P

9805-010346P

9805-010346P

9805-010368P

9805-010368P

9805-010568P

9805-010568P

9805-010568P

9805-010568P

9805-010568P

9805-010568P

9805-010568P

9805-010568P

9805-010568P

9805-01058P

9805-01058P

9805-01058P

9805-01058P

9805-01058P

9805-01058P

9805-0106033P

9805-0106033P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0108775F.
98US-0108779P.
98US-0108787P.
98US-0108788P.
98US-0108801P.
98US-0108801P.
 22-SEP-1998, 23-SEP-1998, 23-SEP-1998, 23-SEP-1998, 23-SEP-1998, 23-SEP-1998, 24-SEP-1998, 24-SEP-1998, 24-SEP-1998, 29-SEP-1998, 29-SEP-1998, 29-SEP-1998, 29-SEP-1998, 30-SEP-1998, 30-SE
                                                                                                                                                                                                                                                                                                                                                                                                             01-0CT-1998
01-0CT-1998
06-0CT-1998
06-0CT-1998
07-0CT-1998
07-0CT-1998
07-0CT-1998
07-0CT-1998
07-0CT-1998
07-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-0CT-1998

08-0CT-1998

20-0CT-1998

20-0CT-1998

21-0CT-1998

22-0CT-1998

22-0CT-1998

22-0CT-1998

22-0CT-1998

23-0CT-1998

24-0CT-1998

24-0CT-1998

28-0CT-1998

28-0C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-NOV-1998;
03-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                           30-SEP-1998
       ó,
                                                                                                                                                                                                                                                                                                                                                   Human; PCR; primer, secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                          Gaps
                                          ö
 4.1%; Score 11.8; DB 1; Length 18; 36.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                   Human PRO 1780 Tagman PCR primer #1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0098716P.
98US-009873P.
98US-009873P.
98US-009873P.
98US-009873P.
98US-009976EP.
98US-00998EP.
98US-00998EP.
98US-010038P.
98US-010038P.
98US-010039P.
98US-0100664P.
98US-0100644P.
98US-0100644P.
98US-0100644P.
98US-0100644P.
98US-0100644P.
98US-0100644P.
98US-0100644P.
                                                                                                                                                                                                         BP.
Query Match 4.1%;
Best Local Similarity 86.7%;
Matches 13; Conservative
                                                                          841 CTCTGAAGACAGCGT 855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001US-00015386
                                                                                                                                                                                                       ADD70968 standard; DNA; 18
                                                                                                                                                                                                                                                                              15-JAN-2004 (first entry)
                                                                                                           CTCTGAAGCCAACGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US2003099625-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-SEP-1998,
01-SEP-1998,
01-SEP-1998,
02-SEP-1998,
02-SEP-1998,
02-SEP-1998,
09-SEP-1998,
09-SEP-1998,
09-SEP-1998,
09-SEP-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10-SEP-1998
10-SEP-1998
10-SEP-1998
10-SEP-1998
10-SEP-1998
10-SEP-1998
10-SEP-1998
15-SEP-1998
15-SEP-1998
16-SEP-1998
16-SEP-1998
16-SEP-1998
16-SEP-1998
17-SEP-1998
18-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-MAY-2003
                                                                                                           17
                                                                                                                                                                                                                                            ADD70968;
                                                                                                                                                                   RESULT 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
                                                                                                                                                                                    ò
                                                                                                       g
```

```
Human, PCR; primer, secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux: umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                            Human PRO 1780 Tagman PCR primer #1.
                                     ADD40045 standard; DNA; 18 BP.
                                                                         (first entry)
                                                                                                                                                                                                 US2003083462-A1.
                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                       10-DEC-2001;
                                                                         15-JAN-2004
                                                                                                                                                                                                                    01-MAY-2003
                                                       ADD40045;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Baker KP,
                  RESULT 886
                                     Novel isolated PRO polypeptides e.g., PRO1130, PRO1275, PRO1418, PRO1555, PRO1787 affect glucose or free fatty acid (FFA) uptake by skeletal muscle cells and are useful for treating diabetes or hyper- or hypo-insulinemia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or
identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fong S;
Hillan KJ;
Watanabe C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an isolated PRO polypeptide (secreted transmembrane protein) having at least 80% amino acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ferrara N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gurney AL,
A, Tumas D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.1%; Score 11.8; DB 1;
86.7%; Pred. No. 6.8e+02;
tive 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              er KP, Botstein D, Desnoyers L, Eaton DL, W, Goddard A, Godowski PJ, Grimaldi JC, OJ, Paoni NF, Roy MA, Smith V, Stewart TA liams PM, Wood WI,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 143; SEQ ID NO 453; 553pp; English.
                                                                                                                               9905-0129674P
9905-0141037P
9905-0144758P
9905-0145698P
9906-US020111.
9906-US020111.
                                   98US-0108848P.
98US-0108849P.
98US-0108851P.
98US-0108851P.
98US-0108852P.
98US-0108858P.
                                                                                                     98US-0113296P.
98US-0114223P.
99WO-US000106.
        98US-0108867P.
98US-0108867P.
98US-0108925P.
                                                                                                                                                                                                                                         2000WO-US000376.
                                                                                                                                                                                                                                                 2000WO-US003565.
2000WO-US004342.
                                                                                                                                                                                                                                                                    2000WO-US005004.
                                                                                                                                                                                                                                                                              2000WO-US005841.
                                                                                                                                                                                                                                                                                                         2000WO-US014042.
2000WO-US014941.
                                                                                                                                                                                                                                                                                                                                    2000WO-US023522.
2000WO-US023328.
                                                                                                                                                                                                                                                                                                                                                                           2000WO-US03267B.
                                                                                                                                                                                                                                                                                                                                                                                  28-FEB-2001; 2001WO-US006520.
01-MAR-2001; 2001WO-US00666.
01-JUN-2001; 2001WO-US017800.
                                                                                                                                                                                                             99WO-US028551.
                                                                                                                                                                                                                               2000WO-US000219
                                                                                                                                                                                                                                                                                      2000WO-US006884.
2000WO-US013705.
                                                                                                                                                                                                                                                                                                                            2000WO-US015264
                                                                                                                                                                                                                                                                                                                                                        2000WO-US030952
                                                                                                                                                                                                                                                                                                                                                                                                              2001WO-US019692.
2001WO-US021066.
                                                                                                                                                                                                                     99WO-US030095
                                                                                                                                                                                                                                                                                                                                                                2000WO-US030873
                                                                                                                                                                                                                                                                                                                                                                                                                                 2001WO-US021735
2001US-00946374
98US-0108806P
                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2003-874602/81.
                                                                                                                                                                                                                                                                            02-MAR-2000;
15-MAR-2000;
17-MAY-2000;
22-MAY-2000;
30-MAY-2000;
                                                                                                                                                                                                                                                                                                                                              24-AUG-2000;
08-NOV-2000;
10-NOV-2000;
                                                                                                                                                                                                                                       06-JAN-2000;
11-FEB-2000;
18-FEB-2000;
24-FEB-2000;
                                                                                                                                                                                                 30-NOV-1999;
02-DEC-1999;
16-DEC-1999;
05-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                              20-JUN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                          04-SEP-2001;
                                   18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
                                                                         18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
                                                                                                                        05-JAN-1999;
16-APR-1999;
23-JUN-1999;
                                                                                                                                                   20-JUL-1999;
26-JUL-1999;
01-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                           01-DEC-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Williams PM,
                                                                                                                                                                                                                                                                                                                                     23-AUG-2000;
                                                                                                     22-DEC-1998;
                                                                                                                                                                               15-SEP-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Baker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pan
```

```
Fong S;
Hillan KJ;
Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New secreted and transmembrane PRO polypeptides useful for treating cancers, kidney disorders, Crohn's disease, diabetes mellitus, hyper- or hypo-insulinemia, sports injuries and arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to an isolated PRO polypeptide (secreted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ferrara N,
Gurney AL, I
A, Tumas D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Desnoyers L, Eaton DL, owski PJ, Grimaldi JC, (A, Smith V, Stewart TA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 143; SEQ ID NO 453; 557pp; English.
11-SEP-1999) 99WO-USCOLLII

15-SEP-1999) 99WO-USCOLLII

16-DEC-1999) 99WO-USCOLLII

16-DEC-1999) 99WO-USCOLSS51.

16-DEC-1999 99WO-USCOLSS51.

16-DES-2000) 2000WO-USCOLSS51.

16-DES-2000) 2000WO-USCOLSS61.

17-MAY-2000) 2000WO-USCOLSS61.

17-MAY-2000) 2000WO-USCOLSS61.

17-MAY-2000) 2000WO-USCOLSS61.

16-MAY-2000) 2000WO-USCOLSS61.

16-NOV-2000) 2000WO-USCOLSS61.

16-NOV-2000] 2000WO-USCOLSS61.

16-NOV-2001) 2001WO-USCOLSS61.

16-NOV-2001) 2001WO-USCOLSS61.

16-NOV-2001) 2001WO-USCOLSS61.

16-NOV-2001) 2001WO-USCOLSS61.

16-NOV-2001) 2001WO-USCOLSS61.

16-NOV-2001) 2001WO-USCOLSS61.

16-NOV-2001) 2001WO-USCOLSS61.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Botstein D, Desno
Idard A, Godowski
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Goodwak Goddard A, Godowsk Pan J, Paoni NF, Roy MA, Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-755122/71.
```

ö

Gaps

..

Indels

CTCTGGTGCCAAGAG 802

788

ઠે g

13; Conservative

**datches** 

Local Similarity

creregreceded 15

```
C transmentance process trems 123 fully defined sequences as given in the specification (including their extracellular domains either cor without their associated signal peptides. Also include are the nucleotide (NA) sequence encoding PRO, a vector comprising the PRO NA, a host cell comprising the vector, producing PRO, a chimaeric molecule comprising PRO fused to a heterologous amino acid sequence, and an anticrompising PRO fused to a heterologous amino acid sequence, and an anticrompising PRO fused to a heterologous amino acid sequence, and an anticrompising PRO fused to a heterologous amino acid sequence, and an anticrompising PRO fused to a heterologous amino acid sequence, and an anticromedia. PRO and PRO NA are useful as hybridisation. PRO is also useful for issue typing. PRO and PRO NA are useful as hybridisation or probes for a cDNA library to isolate the full-length PRO cDNA. PRO NA is useful in development and screening useful readents processing useful sor knock-out animals which are useful in development and screening useful readents. PRO NA is also useful in development and screening useful reading immune response. PRO 1246 and PRO 1246, propypeptides are useful for treating cancerous tumours. PRO 1250, PRO 1246 and PRO 1246 polypeptides are useful for treating cancina clistificiency disorders of polypeptides are useful for treating benome and/or cartilage disorders of polypeptides are useful for treating diabetes in skeletal muscle cells and obesity. PRO 1265, PRO 1244 and PRO 1362, PRO 1255 and PRO 1418, and obesity. PRO 1265, PRO 1244 and PRO 1362, PRO 1364 properties are useful for treating diabetes in skeletal muscle cless and obesity. PRO 1265, PRO 1244 and PRO 1369, PRO 1304, PRO 1304, PRO 1404, P
transmembrane protein) having at least 80% amino acid sequence identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sequence is a Tagman PCR primer used to assay PRO gene amplification in certain tumour cell lines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 18 BP; 3 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
```

ö Gaps ; 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ative 0; Mismatches 2; Indels CTCTGGTGCCAAGAG 802 1 crcrecrececacae 15 13; Conservative Local Similarity 788 datches g 25

```
Human PRO 1780 Taqman PCR primer #1.
      ADD70491 standard; DNA; 18
                   (first entry)
                   15-JAN-2004
             ADD70491;
RESULT 887
   ADD70491
```

Human, PCR; primer, secreted protein; transmembrane protein, PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; unbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skelletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss. 98US-0098723P 98US-0098749P. 98US-0098750P. 98US-0098803P. 98US-0098821P. 06-DEC-2001; 2001US-00006818 98US-0098716P US2003054406-A1. 01-SEP-1998; 01-SEP-1998; 01-SEP-1998; 02-SEP-1998; 02-SEP-1998; Homo sapiens. 20-MAR-2003. 01-SEP-1998;

98US-0101071P. 98US-0101279P. 98US-0101471P. 98US-0101472P. 98US-0101474P. 98US-0102207P. 98US-0102240P. 98US-0102307P. 98US-0102330P. 98US-0102331P. 98US-0102684P. 98US-0102687P. 98US-0102965P. 98US-01033449P. 98US-0103314P. 98US-0103314P. 98US-01033128P. 98US-0099602P. 98US-0099642P. 98US-0099741P. 98US-0099754P. 98US-0099808P. 98US-0099812P. 98US-0099815P. 98US-0099816P. 98US-0100385P. 98US-0100388P. 98US-0100390P. 98US-0100683P. 98US-0100684P. 98US-0100710P. 98US-0100711P. 98US-0100919P. 98US-0100930P. 98US-0100848P. 98US-0101479P. 98US-0101738P. 98US-0101741P. 98US-0101743P. 98US-0101915P. 98US-0101916P. 98US-0099596P. 98US-0099763P. 98US-0099792P. 98US-0100627P. 98US-0100662P. 98US-0100664P. 98US-0100849P. 98US-0101477P. 98US-0102487P. 98US-0100584P 98US-0100661P 98US-0101068P. 98US-0101476P 98US-0102571P. 98US-0103396P. 98US-0103401P. 98US-0103678P. 98US-0104987P. 98US-0103633P 98US-0103679P 10-SEP-1998; 15-SEP-1998; 15-SEP-1998; 15-SEP-1998; 10-SEP-1998; 10-SEP-1998; 16-SEP-1998; 16-SEP-1998; 1998; ,866 1998; 1998; ,898; 1998; 23-SEP-1998; -SEP-1998 866 07-0CT-1998 07-0CT-1998; 07-0CT-1998; 1998 16-SEP-1998 17-SEP-1998 18-SEP-1 23-SEP-19 23-SEP-19 23-SEP-1 24-SEP-29-SEP-1 29-SEP-1 29-SEP-17-SEP-01-OCT-10-SEP-22-SEP-29-SEP-06-OCT 30-SEP 30-SEP 08-OCT 

```
9805-0108867P
9805-0108867P
9805-0108848P
9805-0108849P
9805-0108851P
9805-0108852P
9805-0108852P
9805-0108852P
9805-0108852P
9805-0108852P
9805-0108852P
9805-0108854P
9805-0108854P
9805-0113296P
9805-0113296P
9805-0113296P
9905-014758P
     98US-0105104P

98US-0105169P

98US-0105693P

98US-0105881P

98US-0105881P

98US-0105881P

98US-0106029P

98US-0106023P

98US-0106023P

98US-0106033P

98US-0106033P

98US-0106032P

98US-0106032P

98US-0106032P

98US-0106032P

98US-0106032P

98US-0106032P

98US-0106032P

98US-010633P

98US-010633P
                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US020111.
99WO-US021194.
99US-0162506P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000WO-US000376.
2000WO-US003565.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-US005841.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000WO-US013705.
2000WO-US014042.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2000WO-US023328
2000WO-US030952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000WC-US030873
2000WO-US032678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US005004.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000WO-US006884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99WO-US028313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US030095
2000WO-US000219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000WO-US004342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-FEB-2000;
02-MAR-2000;
15-MAR-2000;
22-MAY-2000;
30-MAY-2000;
30-MAY-2000;
02-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-NOV-2000;
01-DEC-2000;
                                                                                                     28 - OCT - 1998
29 - OCT - 1998
29 - OCT - 1998
30 - OCT - 1998
31 - OCT - 1998
     22-0CT-1998
22-0CT-1998
26-0CT-1998
26-0CT-1998
27-0CT-1998
27-0CT-1998
27-0CT-1998
27-0CT-1998
28-0CT-1998
                                                                                                                                                                                            03-NOV-1998;
03-NOV-1998;
03-NOV-1998;
03-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                23-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15-SEP-1999;
                                                                                                                                                                                                                                                                            17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                          18-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                   18-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                             22-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                              05-JAN-1999
                                                                                                                                                                                      03-NOV-1998
                                                                                                                                                                                                                                                    17-NOV-1998
                                                                                                                                                                                                                                                          17-NOV-1998
17-NOV-1998
                                                                                                                                                                                                                                                                                              17-NOV-1998
                                                                                                                                                                                                                                                                                                                                18-NOV-1998
                                                                                                                                                                                                                                         17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                            18-NOV-1998
```

```
ő
                                                                                                                                 , Fong S;
Hillan KJ;
, Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, PCR, primer, secreted protein, transmembrane protein, PRO, tumour, immune response, cardiac insufficiency disorder, calcium flux, umbilical vein endothelial cell, bone disorder, cartilage disorder, arthritis, wound healing, diabetes, skeletal muscle cells, obesity; Berger disease, nephropathy, Schonlein-Henoch purpura, coeliac disease, dermatitis, herpetiformis, Crohn's disease; thalassaemia, ss.
                                                                                                                                                                                                                                                                                                         The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity
                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                          Novel isolated PRO polypeptide useful for tissue typing, modulating biological activity of cell, as molecular weight markers in protein electrophoresis, for treating arthritis, tumor.
                                                                                                                                                                                                                                                                                                                                                                           .
                                                                                                                                Eaton DL, Ferrara N, naldi JC, Gurney AL, Stewart TA, Tumas D,
                                                                                                                                                                                                                                                                                                                                              Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                 Baker KP, Botstein D, Desnoyers L, Eaton DL, Fe
Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gui
Pan J, Paoni NF, Roy MA, Smith V, Stewart TA,
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                               Example 143; SEQ ID NO 453; 549pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human PRO 1780 Tagman PCR primer #1.
2001MO-US006520.

2001MO-US006666.

2001MO-US017800.

2001MO-US019692.

2001MO-US021966.

2001US-00946374.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0098716P.
98US-0098723P.
98US-0098750P.
98US-0098750P.
98US-0098821P.
98US-0098843P.
98US-0099843P.
98US-0099596P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADD38612 standard; DNA; 18 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0099602P.
98US-0099642P.
98US-0099741P.
                                                                                                                                                                                                                                                                                                                                                                                                    788 CTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-DEC-2001; 2001US-00012755
                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                         (GETH ) GENENTECH INC.
                                                                                                                                                                                                    WPI; 2003-708344/67.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US2003096955-A1.
28-FEB-2001; 2
01-MAR-2001; 2
01-UN-2001; 2
20-UN-2001; 2
29-UN-2001; 2
09-UL-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-SEP-1998,
01-SEP-1998,
01-SEP-1998,
02-SEP-1998,
02-SEP-1998,
02-SEP-1998,
09-SEP-1998,
09-SEP-1998,
09-SEP-1998,
09-SEP-1998,
09-SEP-1998,
09-SEP-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADD38612;
                                                                                                                                                                                                                                                                                                                                                                                                                             Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 888
                                                                                                                                                                                                                                                                                                                                                                                                                             Dp
  ð
```

98US-0099763P. 98US-0099763P. 98US-009980B. 98US-0099812P. 98US-0099812P. 98US-0100382P. 98US-0100382P. 98US-0100382P. 98US-0100382P. 98US-0100624P. 98US-0100624P. 98US-010064B. 98US-010064B. 98US-010064B. 98US-010064B. 98US-010064B. 98US-010064B. 98US-010064B. 98US-010064B. 98US-010064B. 98US-010071B. 98US-010071B. 98US-010071B. 98US-010071B. 98US-0101068P. 98US-0101068P. 98US-0101068P. 98US-0101071P. 98US-0101071P. 98US-0101071P. 98US-0101074P. 98US-010177P. 98US-010147P.	BUGS-0102307 BUGS-0102331 BUGS-0102484 BUGS-0102484 BUGS-0102571 BUGS-0102684 BUGS-0102684 BUGS-0103684 BUGS-0103154 BUGS-01033154 BUGS-01033154 BUGS-01033154 BUGS-01033154 BUGS-01033154 BUGS-01033154 BUGS-01033154 BUGS-0103404 BUGS-0103404 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0103674 BUGS-0105694
PR 10-SEP-1998; PR 10-SEP-1998; PR 10-SEP-1998; PR 10-SEP-1998; PR 10-SEP-1998; PR 10-SEP-1998; PR 15-SEP-1998; PR 15-SEP-1998; PR 15-SEP-1998; PR 15-SEP-1998; PR 16-SEP-1998; PR 16-SEP-1998; PR 17-SEP-1998; PR 18-SEP-1998; PR 18-SEP-1998; PR 23-SEP-1998; PR 24-SEP-1998; PR 24-SEP-1998	29.SEP-1998 29.SEP-1998 30.SEP-1998 30.SEP-1998 30.SEP-1998 30.SEP-1998 30.SEP-1998 30.SEP-1998 01.OCT-1998 06.OCT-1998 07.OCT-1998 07.OCT-1998 08.OCT-1998 08.OCT-1998 08.OCT-1998 20.OCT-1998 22.OCT-1998 23.OCT-1998 24.OCT-1998 25.OCT-1998 26.OCT-1998 26.OCT-1998 27.OCT-1998

8US - 0105882P BUS - 0106062P BUS - 0106053P BUS - 0106032P BUS - 0106032P BUS - 0106032P BUS - 0106034P BUS - 0106134P BUS - 0106134P BUS - 010634P BUS - 010634P BUS - 010636P BUS - 010636P BUS - 010636P BUS - 010636P	8015-010659 8015-0106593 8015-0106593 8015-010778 8015-0108778 8015-010878 8015-010878 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880 8015-010880	US-0129674P US-0129674P US-0129674P US-014568P WO-US0201191 WO-US0201191 WO-US0201191 WO-US0205011 WO-US0205011 WO-US0205011 WO-US00205011
27-OCT-199 28-OCT-199 28-OCT-199 28-OCT-199 28-OCT-199 28-OCT-199 29-OCT-199 29-OCT-199 30-OCT-199 30-OCT-199	03-NOV-19 03-NOV-19 03-NOV-19 03-NOV-19 17-NOV-19 17-NOV-19 17-NOV-19 17-NOV-19 17-NOV-19 17-NOV-19 17-NOV-19 17-NOV-19 17-NOV-19 18-NOV-19 18-NOV	16-APR-1999 23-JUN-1999 26-JUN-1999 26-JUN-1999 15-SEP-1999 30-JUN-1999 30-JUN-1999 30-JUN-1999 30-JUN-1999 30-JUN-2000 30-MAR-2000 30-MAY-2000
		**************************************

```
98US-0103314P.
98US-0103315P.
98US-0103395P.
98US-0103395P.
98US-0103395P.
98US-0103401P.
98US-0103678P.
98US-0103678P.
98US-0103678P.
98US-010500P.
98US-010500P.
98US-010500P.
98US-010500P.
98US-010500P.
98US-010500P.
98US-010508P.
98US-010508P.
98US-010508P.
98US-010508P.
98US-010508P.
98US-010508P.
98US-010508P.
98US-010508P.
98US-010508P.
                                                                                                                                                                                                                                                               98US-0101477P

98US-0101419P

98US-0101741P

98US-0101743P

98US-0101143P

98US-010115P

98US-0102207P

98US-0102240P

98US-0102310P

98US-0102311P

98US-0102311P

98US-0102487P
                                                                                                                                                                                                                                                                                                                                                                                                                                    98US-0102684P.
98US-0102687P.
98US-0102965P.
98US-0103258P.
98US-0103449P.
98US-0100385P

98US-0100398P

98US-0100584P

98US-0100662P

98US-0100664P

98US-0100664P

98US-0100664P

98US-0100683P

98US-0100711P

98US-0100711P

98US-010071P

98US-010071P

98US-010071P

98US-010071P

98US-010071P

98US-01014P

98US-01014P

98US-01014P

98US-010147P

98US-010147P

98US-010147P

98US-010147P

98US-010147P

98US-010147P

98US-010147P

98US-010147P

98US-010147P

98US-010147P
                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0102571P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     08-OCT-1998;
14-OCT-1998;
20-OCT-1998;
20-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20-0CT-1998;
21-0CT-1998;
22-0CT-1998;
22-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      26-OCT-1998;
26-OCT-1998;
27-OCT-1998;
                                                                                                                                                                                                                                                                                                          24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
29-SEP-1998;
29-SEP-1998;
29-SEP-1998;
29-SEP-1998;
                                                                                                                                                                                                                                   23-SEP-1998;
23-SEP-1998;
23-SEP-1998;
23-SEP-1998;
24-SEP-1998;
24-SEP-1998;
                                                                                                                                                          18-SEP-1998;
18-SEP-1998;
18-SEP-1998;
18-SEP-1998;
22-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                            30-SEP-1998;
01-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                             30-SEP-1998;
                                                                                                                             17-SEP-1998;
17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                         30-SEP-1
   0;
                                                                                                                                                                                                                                                                                                                                                                                                       Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coellac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                       Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S;
Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Hillan KJ;
Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Matanabe CK;
                                                                                                                                                             The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity to an amino acid sequence chosen from 123 fully defined sequences as
                                                                                                                                                                                                                           Gaps
                                                                                               Novel isolated PRO polypeptide, useful for treating cancerous tumors, cardiac insufficiency disorders, wound healing, diabetes mellitus,
                                                                                                                                                                                                                           .;
                                                                                                                                                                                                     / Match 4.1%; Score 11.8; DB 1; Length 18; Local Similarity 86.7%; Pred. No. 6.8e+02; Local 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                           Example 143; SEQ ID NO 453; 556pp; English.
                                                                                                                                                                                                                                                                                                                                                                                       Human PRO 1780 Tagman PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9805-0099642P.
9805-0099741P.
9805-0099741P.
9805-0099763P.
9805-0099792P.
9805-0099812P.
9805-0099815P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0098750P.
98US-0098821P.
98US-0098843P.
98US-0099536P.
98US-0099556P.
                                                                                                                                                                                                                                                                                                                          ADD39568 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                07-DEC-2001; 2001US-00011671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0098723P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0099602P
                                                                                                                                                                                                                                                  CTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                     crcreereccacae 15
                                   Gao W, Goddard A, Godowsk:
Pan J, Paoni NF, Roy MA,
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                   (first entry)
      (GETH ) GENENTECH INC.
                                                                               WPI; 2003-787000/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003096954-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
09-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10.SEP-1998;
10.SEP-1998;
10.SEP-1998;
10.SEP-1998;
10.SEP-1998;
10.SEP-1998;
10.SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-SEP-1998;
09-SEP-1998;
10-SEP-1998;
                                                                                                                         thalassemias.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                  15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-MAY-2003.
                                                                                                                                                                                                                                                  788
                                                                                                                                                                                                                                                                                                                                              ADD39568;
                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                    Best Loca
Matches
                                                                                                                                                                                                                                                                                                                ADD39568
                                                                                                                                                                                                                                                                                                      RESULT
                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                   ð
```

WPI; 2003-786999/74

```
15-SEP-1999; 99WG-USC21194.
29-OCT-1999; 99WG-USC21194.
20-DEC-1999; 99WG-USC28551.
16-DEC-1999; 99WG-USC28551.
16-DEC-1999; 99WG-USC38551.
16-DEC-1999; 99WG-USC38551.
16-DEC-1999; 99WG-USC38551.
11-FEB-2000; 2000WG-USC03556.
11-FEB-2000; 2000WG-USC03566.
11-FEB-2000; 2000WG-USC036841.
15-MAR-2000; 2000WG-USC036841.
15-MAR-2000; 2000WG-USC08841.
15-MAY-2000; 2000WG-USC08841.
17-MAY-2000; 2000WG-USC08841.
22-MAY-2000; 2000WG-USC014941.
23-AUG-2000; 2000WG-USC14941.
23-AUG-2000; 2000WG-USC1564.
23-AUG-2000; 2000WG-USC1564.
23-AUG-2000; 2000WG-USC135678.
24-AUG-2000; 2000WG-USC135678.
26-PEB-2011; 2011WG-USC03666.
21-UNN-2001; 2001WG-USC03666.
         98US - 0106148P

98US - 0106448P

98US - 0106448P

98US - 0106434P

98US - 0106648P

98US - 0106919P

98US - 0106919P

98US - 0106913P

98US - 0106913P

98US - 0106913P

98US - 010897P

98US - 010897P

98US - 010880P

98US - 0108850P

98US - 0108850P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US021066
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US021735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GETH ) GENENTECH INC.
28-OCT-1998
28-OCT-1998
29-OCT-1998
29-OCT-1998
29-OCT-1998
30-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                             23-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                     26-JUL-1999;
01-SEP-1999;
```

Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Pan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Williams PM, Wood WI;

Fong S; Hillan KJ; Watanabe CK;

ö Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss. or identity Gaps Novel isolated PRO polypeptide useful for tissue typing, modulating biological activity of cell, as molecular weight markers in protein electrophoresis, for treating arthritis, tumor. The invention relates to an isolated PRO polypeptide (secreted transmembrane protein) having at least 80% amino acid sequence ö 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ive 0; Mismatches 2; Indels 550pp; English. Human PRO 1780 Taqman PCR primer #1. 98US-0098716P.
98US-0098723P.
98US-0098749P.
98US-0098613P.
98US-0098621P.
98US-0099536P.
98US-0099562P.
98US-0099562P.
98US-009962P.
98US-0099754P.
98US-0099754P.
98US-0099763P.
98US-0099763P.
98US-009978P.
98US-009988P.
98US-009988P.
98US-00998R.6P.
98US-00998R.6P.
98US-00998R.6P.
98US-0100388P.
98US-0100388P.
98US-0100388P. ADD39091 standard; DNA; 18 BP. 788 CICTGGIGCCAAGAG 802 06-DEC-2001; 2001US-00007194 Best Local Similarity 86.7%; Matches 13; Conservative Example 143; SEQ ID NO 453; crcrcereccacae 15 (first entry) US2003092061-A1. Homo sapiens. 01-SEP-1998; 01-SEP-1998; 01-SEP-1998; 02-SEP-1998; 02-SEP-1998; 02-SEP-1998; 10-SEP-1998; 10-SEP-1998; 5-SEP-1998; 15-JAN-2004 0-SEP-1998 5-SEP-1998; 6-SEP-1998; 15-MAY-2003 Н ADD39091; Query Match RESULT 890 ADD39091 ð 

```
98US-0100664P.
98US-0100683P.
98US-0100710P.
98US-0100711P.
98US-0100919P.
98US-0100919P.
98US-0100919P.
98US-0101044P.
98US-0101472P.
98US-0101477P.
98US-0101473P.
98US-0101477P.
98US-0101477P.
98US-0101478P.
98US-010141P.
98US-
  17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
18-SEP-1998;
18-SEP-1998;
18-SEP-1998;
18-SEP-1998;
18-SEP-1998;
18-SEP-1998;
23-SEP-1998;
23-SEP-1998;
23-SEP-1998;
24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
25-SEP-1998;
26-OCT-1998;
30-SEP-1998;
30-SE
```

98US-0106902P 98US-0106932P 98US-0106932P 98US-0106932P 98US-0106934P 98US-0108775P 98US-0108775P 98US-0108778P 98US-0108778P 98US-0108778P 98US-0108778P 98US-0108778P 98US-010878P 98US-0108867P 98US-0108867P 98US-01088687P 98US-01088687P 98US-01088687P 98US-01088687P 98US-01088687P 98US-01088687P 98US-01088687P 98US-0108858P 98US-0108958P 98US-0108958P 98US-0118256P 99WO-USO01114 99WO-USO0118 90WO-USO0118 90WO-USO018 90WO 2001US-00946374 03-NOV-1998; 03-NOV-1998; 03-NOV-1998; 03-NOV-1998; 10-NOV-1998; 117-NOV-1998; 118-NOV-1998; 118-NOV-1998; 118-NOV-1998; 118-NOV-1998; 118-NOV-1998; 118-NOV-1998; 118-NOV-1999; 118-NOV 

## (GETH ) GENENTECH INC.

Ŗ, Fong S; Hillan KJ; Watanabe C Ferrara N, Gurney AL, H A, Tumas D, Baker KP, Botstein D, Desnoyers L, Eaton DL, F^e Godowski PJ, Grimaldi JC, Gui Gan J, Peoni NF, Roy MA, Smith V, Stewart TA, Williams PM, Wood WI;

## WPI; 2003-765477/72.

New isolated PRO polypeptide such as PRO1560, PRO444, PRO1018, PRO1773, PRO1244, PRO1246, useful for treating cancerous tumors, cardiac insufficiency disorders, wound healing, Crohn's disease, celiac disease.

```
98US-0100848P

98US-0101044P

98US-0101068P

98US-0101071P

98US-0101477P

98US-0101477P

98US-0101477P

98US-0101477P

98US-0101477P

98US-0101477P

98US-0101477P

98US-0101477P

98US-0101478P

98US-0101478P

98US-0101478P

98US-0101478P

98US-0101478P

98US-0101478P

98US-0101478P

98US-0101314P

98US-0101318P

98US-0101318P

98US-0101318P

98US-0101318P

98US-0101318P

98US-010502P

98US-010503P

98US-010603P

98US-010603P
                              18-SEP-1998;
18-SEP-1998;
18-SEP-1998;
22-SEP-1998;
23-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              08-0CT-1998;
14-0CT-1998;
20-0CT-1998;
20-0CT-1998;
20-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-0CT-1998;
22-0CT-1998;
22-0CT-1998;
26-0CT-1998;
27-0CT-1998;
27-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-0CT-1998
28-0CT-1998
28-0CT-1998
28-0CT-1998
28-0CT-1998
29-0CT-1998
29-0CT-1998
30-0CT-1998
                                                                                                                                                                                                           24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
                                                                                                                                                                                                                                                                                                          29-SEP-1998;
29-SEP-1998;
29-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                        29-SEP-1998;
30-SEP-1998;
30-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-OCT-1998;
07-OCT-1998;
07-OCT-1998;
                                                                                                                                                                            23-SEP-1998
23-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                        30-SEP-1998
30-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                      01-OCT-1998
01-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-OCT-1998
06-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-0CT-1998
27-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     03-NOV-1998
                                                                                                                                                                                                                                                                                           29-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     07-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-0CT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 08-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  08-OCT-1998
   ö
                                                                                                                                                                                                                                                                                                                                                                                      Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                    or
identity
                                                                                                               Gaps
                              The invention relates to an isolated PRO polypeptide (secreted transmembrane protein) having at least 80% amino acid sequence
                                                                                                               0
                                                                            Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
Example 143; SEQ ID NO 453; 555pp; English
                                                                                                                                                                                                                                                                                                                                                        Human PRO 1780 Taqman PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9805-0098723P

9805-0098723P

9805-0098821P

9805-0098821P

9805-0099536P

9805-0099536P

9805-0099536P

9805-0099536P

9805-0099542P

9805-0099612P

9805-0099612P

9805-0099612P

9805-0099612P

9805-0099615P

9805-0099815P

9805-0099815P

9805-0100388P

9805-0100388P

9805-0100388P

9805-0100664P

9805-0100664P

9805-0100664P

9805-0100664P

9805-0100664P

9805-0100664P

9805-0100664P
                                                                                                                                                                                                                                                          BP
                                                                                                                                             CTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001US-00006117
                                                                                                                                                              CTCTGGTGCCCACAG 15
                                                                                                                                                                                                                                                          ADD40522 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US2003082627-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-SEP-1998

01-SEP-1998

02-SEP-1998

02-SEP-1998

03-SEP-1998

04-SEP-1998

09-SEP-1998

09-SEP-1998

10-SEP-1998

10-SEP-1998

10-SEP-1998

10-SEP-1998

10-SEP-1998

10-SEP-1998

10-SEP-1998

11-SEP-1998

11-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-DEC-2001;
                                                                                                                                                                                                                                                                                                                      15-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-2003
                                                                                                                                             788
                                                                                                                                                                                                                                                                                          ADD40522;
                                                                                                                                                                            Н
                                                                                                                                                                                                                         AD040522
AD040522
AC AD0405.
XX
AC AD0405.
XX
DI 15-JAN
XX
Human;
XX
Human;
XX
Human;
XW
Arthri
XW
Arthri
XW
Arthri
XW
Arthri
XW
Accompany
Accompa
 X X 22
                                                                                                                                             ð
                                                                                                                                                                  음
```

o;

Gaps

0;

```
This invention describes novel oligonucleotides used in a method for detecting beer-spoilage bacteria in a sample. The bacteria detected include lattic acid bacteria of the genera Lactobacillus or Pediococcus, especially the species L. coryniformis, L. perolens, L. buchneri, L. plantarum, L. fructivorans, L. lindheri, L. casei, L. brevis or P. damnosus or Gram-negative bacteria of the genera Pectinatus and Megasphaera, specifically P. frisingensis, P. cerevisiphilus and Cerevisiae. The oligonucleotides of the invention provide rapid detection of spoilage bacteria (typically within 48 hours, compared with 7-12 days for conventional culture methods), can detect all relevant bacteria in parallel, can differentiate between species of the same genus, and are easy to use. ADE14806-ADE15247 represent the oligonucleotides used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                         New oligonucleotides, useful for rapid detection of beer-spoilage bacteria by in situ hybridization, are specific for type, genus or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.1%; Score 11.8; DB 1; Length 18; Local Similarity 86.7%; Pred. No. 6.8e+02; Conservative 0; Mismatch.
                                                                                                                                                                                                               ss; primer; detection; beer-spoilage; lactic acid bacteria; Gram-negative bacteria; spoilage bacteria.
Indels
2,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 18 BP; 1 A; 7 C; 2 G; 8 T; 0 U; 0 Other;
Mismatches
                                                                                                                                                                                        Beer spoilage-associated primer SEQ ID 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 258; 88pp; German.
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                                                                                               ADE15063 standard; DNA; 18 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          843
                                                                                                                                                                                                                                                                                                                                                        19-JUN-2001; 2001DE-01029410.
                                                                                                                                                                                                                                                                                                                                19-JUN-2002; 2002WO-EP006808
                         788 CTCTGGTGCCAAGAG 802
                                                 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4 Greergrichers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADE50743
ID ADE50743 standard; DNA; 18
                                                                                                                                                                                                                                                     Lactobacillus coryniformis.
                                                                                                                                                                (first entry)
13; Conservative
                                                  1 CTCTGGTGCCCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          829 GICTCTITICTICTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       method of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                          Snaidr J;
                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-175243/17.
                                                                                                                                                                                                                                                                                                                                                                                 (VERM-) VERMICON AG
                                                                                                                                                                                                                                                                              WO2002103043-A2.
                                                                                                                                                                29-JAN-2004
                                                                                                                                                                                                                                                                                                       27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                         Beimfohr C,
                                                                                                                                        ADE15063;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      species.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                                                                       RESULT 892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 893
 Matches
                                                                                                                                       AXXX
                         ò
                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fong S;
Hillan KJ;
Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated PRO polypeptides such as PRO1560, PRO444, PRO1018, PRO1773, PRO1244, PRO1246, are useful for treating cancerous tumors and cardiac insufficiency disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ferrara N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gurney AL,
A, Tumas D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    P. Botstein D, Desnoyers L, Eaton DL, Fe Goddard A, Godowski PJ, Grimaldi JC, Gu
Paoni NF, Roy MA, Smith V, Stewart TA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 143; SEQ ID NO 453; 550pp; English.
                                                                                       98US-0108967P.
98US-0108925P.
98US-0108848P.
                                       98US-0108801P.
                                                    98US-0108802P.
                                                              98US-0108806P.
98US-0108807P.
                                                                                                                             98US-0108849P.
                                                                                                                                           98US-0108850P.
                                                                                                                                                     98US-0108851P.
                                                                                                                                                                 98US-0108852P.
                                                                                                                                                                              98US-0108858P.
                                                                                                                                                                                         98US-0108904P.
                                                                                                                                                                                                       98US-0113296P.
                                                                                                                                                                                                                  98US-0114223P.
                                                                                                                                                                                                                              99WO-US000106.
                                                                                                                                                                                                                                                      99US-0141037P.
                                                                                                                                                                                                                                                                               99US-0145698P.
                                                                                                                                                                                                                                                                                                         99WO-US021194.
                                                                                                                                                                                                                                                                                                                    99US-0162506P.
99WO-US028313.
                                                                                                                                                                                                                                                                                                                                             99WO-US028551.
                                                                                                                                                                                                                                                                                                                                                           99WO-US030095.
                                                                                                                                                                                                                                                                                                                                                                      2000WO-US000219,
                                                                                                                                                                                                                                                                                                                                                                                  2000WO-US000376.
                                                                                                                                                                                                                                                                                                                                                                                                            2000WO-US004342.
                                                                                                                                                                                                                                                                                                                                                                                                                       2000WO-US005004.
                                                                                                                                                                                                                                                                                                                                                                                                                                  2000WO-US005841.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US006884.
2000WO-US013705.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000WO-US014042.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000WO-US015264.
2000WO-US023522.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2000WO-US030952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000WO-US030873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-DEC-2000; 2000WO-US032678.
28-FEB-2001; 2001WO-US006520.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-MAR-2001, 2001WO-US006666
01-JUN-2001, 2001WO-US017800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     04-SEP-2001; 2001US-00946374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wood WI:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-755104/71.
                                                                                                                                                                                                                                                                            26-7UL-1999;
15-SEP-1999;
15-SEP-1999;
29-OCT-1999;
30-NOV-1999;
16-DEC-1999;
16-DEC-1999;
06-7AN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-MAY-2000;
02-JUN-2000;
23-AUG-2000;
                                               17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
18-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                  02-MAR-2000;
15-MAR-2000;
17-MAY-2000;
22-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Williams PM,
                                                                                                                                                   18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
18-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                              11-FEB-2000;
18-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         24-AUG-2000;
08-NOV-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                       24-FEB-2000;
                                                                                                                                                                                                                  30-DEC-1998;
05-JAN-1999;
                                      17-NOV-1998
                                                                                                                                                                                                       22-DEC-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Baker KP,
                                                                                                                                                                                                                                          16-APR-
                                                                                                                                                                                                                                                       23 - JUN-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gao W,
```

0

Gaps

.; 0

ADE50743;

Length 18;

4.1%; Score 11.8; DB 1; 86.7%; Pred. No. 6.8e+02;

Query Match Best Local Similarity

```
Human; PCR; primer; secreted protein; transmembrane protein, PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skelletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                PRO 1780 Taqman PCR primer #1
                                                                                                                                                                                                                                                                                                      98US-0098716F.
98US-009873P.
98US-0098749P.
98US-0098749P.
98US-009863P.
98US-0099643P.
98US-0099642P.
98US-0099642P.
98US-0099762P.
98US-0099763P.
98US-0099763P.
98US-0099763P.
98US-0099763P.
98US-0099763P.
98US-0099763P.
98US-0100584P.
98US-0100664P.
98US-0100664P.
98US-0100664P.
98US-0100664P.
98US-0100664P.
98US-0100664P.
98US-010064P.
98US-010071P.
98US-010147P.
                                                                                                                                                                                                                                                                            2001US-00015393
 (first entry)
                                                                                                                                                                                                           US2003069179-A1
                                                                                                                                                                                                                                                                                                        01-SEP-1998

01-SEP-1998

02-SEP-1998

02-SEP-1998

03-SEP-1998

09-SEP-1998

09-SEP-1998

09-SEP-1998

09-SEP-1998

10-SEP-1998

10-SEP-1998

10-SEP-1998

10-SEP-1998

10-SEP-1998

11-SEP-1998

12-SEP-1998

13-SEP-1998

13-SE
                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                            11-DEC-2001;
29-JAN-2004
                                                                                                                                                                                                                                           10-APR-2003
                                 Human
```

9805-01023310P 9805-01022481P 9805-01024841P 9805-01024841P 9805-01024841P 9805-0102671P 9805-0102687P 9805-0102687P 9805-0103288P 9805-01033388P 9805-01033388P 9805-0103338P 9805-0103338P 9805-0103338P 9805-0103338P 9805-0103338P 9805-0103338P 9805-0103338P 9805-0103338P 9805-0103338P 9805-010333P 9805-010333P 9805-0106033P 9805-0106034P 9805-0106034P 9805-0106034P 9805-0106034P 9805-0108080P 9805-0108080P 9805-0108080P 9805-0108080P 9805-0108080P 9805-0108080P 9805-0108080P 9805-0108080P 9805-01080P 9805-0108080P 29-SEP-1998
29-SEP-1998
29-SEP-1998
30-SEP-1998
30-SEP 17-NOV-1998 17-NOV-1998 18-NOV-1998 

```
arthritis; wound healing; diabetes; skeletal muscle cells; obesity;
Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease;
dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                                                                 98US-0101471P.
98US-0101472P.
98US-0101474P.
98US-0101475P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        980S-0101477P.
980S-0101479P.
980S-0101738P.
980S-0101741P.
980S-0101915P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0102484P.
98US-0102487P.
98US-0102570P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0102207P.
98US-0102240P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9BUS-0102331P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   98US-0102307P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0102330P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0102571P
                                                                                                                                                     2001US-00013430
                                                                                          US2003092883-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18-SEP-1998;
18-SEP-1998;
22-SEP-1998;
23-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-SEP-1998;
30-SEP-1998;
30-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
29-SEP-1998;
                                                                                                                                                                                 01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
09-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                     09-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
11-SEP-1998,
11-SEP-1998,
11-SEP-1998,
11-SEP-1998,
11-SEP-1998,
11-SEP-1998,
11-SEP-1998,
11-SEP-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
17-SEP-1998;
18-SEP-1998;
18-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-SEP-1998;
23-SEP-1998;
23-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 29-SEP-1998;
29-SEP-1998;
29-SEP-1998;
29-SEP-1998;
                                                            Homo sapiens.
                                                                                                                                                    10-DEC-2001;
                                                                                                                         15-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-SEP-1
   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Fong S;
Hillan KJ;
Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; PCR; primer; secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel secreted and transmembrane PRO polypeptides useful in the preparation of a medicament for treating a condition responsive to PRO polypeptide and as therapeutic agents e.g. vaccines.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       D, Desnoyers L, Eaton DL, Ferrara N, Godowski PJ, Grimaldi JC, Gurney AL, Roy MA, Smith V, Stewart TA, Tumas D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; ative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 143; SEQ ID NO 453; 555pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PRO 1780 Tagman PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                   01-DEC-2000; 2000WO-US032678.

28-FEB-2001; 2001WO-US006520.

01-MAR-2001; 2001WO-US006666.

01-JUN-2001; 2001WO-US017800.

29-JUN-2001; 2001WO-US019692.

29-JUN-2001; 2001WO-US021066.
                                                                                                                                                                                                                                                          2000WO-US014042.
2000WO-US014941.
2000WO-US015264.
2000WO-US023522.
2000WO-US023328.
99US-0141037P.
99US-0144758P.
99US-0145698P.
                                                                                                                                                                       2000WO-US003565.
                                                                                                                                                                                  2000WO-US004342.
2000WO-US005004.
                                                                                                                                                                                                                  2000WO-US005841.
                                                                                                                                                                                                                                                2000WO-US013705.
                                                                                                                                                                                                                                                                                                                                      2000WO-US030952.
2000WO-US030873.
                                                                                                                                         2000WO-US000219
                                                                                                                                                       2000WO-US000376
                                                                                                                                                                                                                               2000WO-US006884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-SEP-2001; 2001US-00946374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                788 CTCTGGTGCCAAGAG 802
                                              99WO-US020111
99WO-US021194
                                                                          99US-0162506P
99WO-US028313
                                                                                                                            99WO-US030095
                                                                                                          99WO-US028551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gao W, Goddard A, Godowsk
Pan J, Paoni NF, Roy MA,
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Crcredrecccacae 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADE20355 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Botstein D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-708395/67.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                    11. FEB-2000;
18-FEB-2000;
24-FEB-2000;
02-MAR-2000;
115-MAY-2000;
22-MAY-2000;
30-MAY-2000;
31-MAY-2000;
23-AUG-2000;
24-MAY-2000;
23-AUG-2000;
24-MAY-2000;
24-MAY-2000;
26-NAY-2000;
26-NAY-2000;
                                                                                                         02-DEC-1999;
16-DEC-1999;
05-JAN-2000;
06-JAN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-JAN-2004
                                                                          29-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Baker KP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADE20355;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 894
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADE20355
   REAL STANFORM OF STANFORM STAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ਨੇ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           qq
```

```
98US-0102684P.
98US-0102867P.
98US-0103449P.
98US-0103449P.
98US-01034149P.
98US-0103315P.
98US-0103315P.
98US-0103395P.
98US-0103396P.
98US-010349P.
98US-010349P.
98US-010369P.
98US-010369P.
98US-010560P.
98US-010603P.
                                                                                                                                                                                                                                                                                                                                                                                98US-0106919E

98US-0106913E

98US-0106934E

98US-0107783E

98US-0108775E

98US-0108775E

98US-0108778E

98US-010877E

98US-0108802E

98US-0108802E

98US-0108802E

98US-0108807E

98US-0108807E

98US-0108867E

98US-0108867E

98US-0108867E

98US-0108867E

98US-0108867E

98US-0108867E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 98US-0108904P.
98US-0113296P.
98US-0114223P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99US-0129674P.
99US-0141037P.
99US-0144758P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99WO-US021194.
99US-0162506P.
99WO-US028313.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US000106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99US-0145698P
99WO-US020111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-NOV-1998,
17-NOV-1998,
17-NOV-1998,
17-NOV-1998,
18-NOV-1999,
18-NOV-1998,
18-NOV-1998,
18-NOV-1998,
18-NOV-1998,
18-NOV-1998,
18-NOV-1998,
18-NOV-1998,
18-NOV-1998,
16-NOV-1998,
16-NOV-1998,
16-NOV-1998,
16-NOV-1998,
16-NOV-1998,
23-DEC-1998,
23-DEC-1998,
23-DEC-1999,
23-UN-1999,
23-UN-1999,
26-UN-1999,
01-0CT-1998;

01-0CT-1998;

02-0CT-1998;

06-0CT-1998;

07-0CT-1998;

07-0CT-1998;

07-0CT-1998;

07-0CT-1998;

07-0CT-1998;

07-0CT-1998;

08-0CT-1998;

08-0CT-1998;

20-0CT-1998;

21-0CT-1998;

22-0CT-1998;

22-0CT-1998;

23-0CT-1998;

23-0CT-1998;

24-0CT-1998;

25-0CT-1998;

26-0CT-1998;

27-0CT-1998;

28-0CT-1998;

28-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                           03-NOV-1998;
03-NOV-1998;
03-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-SEP-1999;
15-SEP-1999;
29-OCT-1999;
30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                      10-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                         17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-NOV-1998
```

```
Hillan KJ;
Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fong S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New isolated PRO polypeptide useful for tissue typing, modulating biological activity of cell, as molecular weight markers in protein electrophoresis, for treating arthritis and tumors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gene therapy; vaccine; rheumatoid arthritis; gene modulation; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Baker KP, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gurney AL, Fpan J, Paoni NF, Roy MA, Smith V, Stewart TA, Tumas D, Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
4.1%; Score 11.8; DB 1; Length 18;
Best Local Similarity 86.7%; Pred. No. 6.8e+02;
Matches 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human alpha-1-antitrypsin forward primer #SEQ ID 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 143; SEQ ID NO 453; 555pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-FEB-2001; 2001WO-US006520.
01-MTM-2001; 2001WO-US006666.
01-UTM-2001; 2001WO-US017800.
20-JUN-2001; 2001WO-US019692.
29-JUN-2001; 2001WO-US021066.
09-JUN-2001; 2001WO-US021066.
04-SEP-2001; 2001US-US021066.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
                                             2000WO-US000219.
2000WO-US00376.
2000WO-US0034342.
2000WO-US005004.
2000WO-US005841.
2000WO-US005884.
2000WO-US005884.
                                                                                                                                                                                                                                                                                                  2000WO-US014941.
2000WO-US015264.
2000WO-US023522.
2000WO-US023328.
                                                                                                                                                                                                                                                                                                                                                                                                                                   2000WO-US030873
2000WO-US032678.
2001WO-US006520.
2001WO-US006666.
2001WO-US017800.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   788 CTCTGGTGCCAAGAG 802
                            99WO-US030095
                                                                                                                                                                                                                                                                                                                                                                                                               2000WO-US030952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 crcredreccacae 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADE34614 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-765493/72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003048323-A2
                    16-DEC-1999;
05-JAN-2000;
11-FEB-2000;
24-FEB-2000;
24-FEB-2000;
24-FEB-2000;
24-FEB-2000;
24-MAY-2000;
11-MAY-2000;
22-MAY-2000;
23-MU-2000;
23-MU-2000;
24-AUG-2000;
24-AUG-2000;
06-000;
24-AUG-2000;
10-NOV-2000;
21-DON-2000;
21-DON-2000;
21-DON-2000;
21-DON-2000;
21-DON-2000;
21-DON-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADE34614;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 895
ADE34614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REAL STANFORM OF STANFORM STAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
```

ö

03-DEC-2002; 2002WO-US038461.

12-JUN-2003

```
9805-0101477P

9805-0101477P

9805-0101741P

9805-0101741P

9805-0101741P

9805-0101741P

9805-0101240P

9805-0102307P

9805-0102307P

9805-0102310P

9805-0102484P

9805-0102484P

9805-0102484P

9805-0102484P

9805-0102484P

9805-0102484P

9805-0102484P

9805-0102484P

9805-0102571P

9805-010258P

9805-010358P

9805-010358P

9805-0103314P

9805-0103314P

9805-0103314P

9805-0103314P

9805-0103314P
                                                                                                                   9805-0099808P-
9805-0099812P-
9805-0099816P-
9805-0100385P-
9805-0100584P-
9805-0100584P-
9805-0100661P-
9805-0100661P-
9805-0100661P-
                                                                                                                                                                                                                                                                 98US-0100684P
98US-0100684P
98US-0100711P
98US-0100919P
98US-0100848P
98US-0100848P
98US-0100848P
98US-01014P
98US-010104P
98US-0101071P
98US-0101071P
98US-0101071P
98US-0101071P
98US-0101471P
                                              98US-0099602P.
98US-0099642P.
98US-0099741P.
98US-0099754P.
98US-0099754P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0103679P.
98US-0103711P.
98US-0104257P.
98US-0104987P.
                                    98US-0099598P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98US-0105000P
00-SEP-1998,
09-SEP-1998,
09-SEP-1998,
09-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
10-SEP-1998,
11-SEP-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-SEP-1998;
24-SEP-1998;
24-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-OCT-1998;
02-OCT-1998;
06-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-0CT-1998;
07-0CT-1998;
07-0CT-1998;
07-0CT-1998;
07-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-OCT-1998;
20-OCT-1998;
                                                                                                                                                                                                                                          16-SEP-1998,
                                                                                                                                                                                                                                                                  17-SEP-1998,
                                                                                                                                                                                                                                                                                          17-SEP-1998;
17-SEP-1998;
                                                                                                                                                                                                                                                                                                                   17-SEP-1998
                                                                                                                                                                                                                                                                                                                                          18-SEP-1998
                                                                                                                                                                                                                                                                                                                                                     18-SEP-1998;
18-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                     22-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                23-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                            23-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                       23-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-SEP-1998,
23-SEP-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-SEP-1998;
24-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-SEP-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-0CT-1998;
07-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-OCT-1998;
08-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                       18-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-SEP-1998
  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; PCR; primer, secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                                                                                                                               The invention relates to an assay for identifying a compound that modulates the activity of a gene or protein associated with rheumatoid arthritis. The method of the invention comprises providing a cell expressing a gene or protein associated with rheumatoid arthritis, contacting the cell with a test compound, and determining whether the test compound modulates the activity of the gene or protein. The method of the invention is useful for preparing a composition for treating rheumatoid arthritis. The current sequence represents a PCR primer used in the isolation of rheumatoid arthritis associated genes.
                                                                                                                                                                 Identifying a compound that modulates the activity of rheumatoid arthritis-associated gene or protein by determining whether the test compound modulates the activity of the gene or protein expressed in the
                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                 4.1%; Score 11.8; DB 1; Length 18; 86.7%; Pred. No. 6.8e+02; vative 0; Mismatches 2; Indels
                                                                                                                      Lu P;
                                                                                                                                                                                                                                                                                                                                                                         Sequence 18 BP; 3 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                   Carman J, Nadler SG, Bowen M, Neubauer M,
                                                                                                                                                                                                                             Disclosure; Page 24; 170pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human PRO 1780 Tagman PCR primer #1
                                                                                                                                                                                                     contacted with the compound.
                                  BRISTOL-MYERS SQUIBB CO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0098723P
98US-0098749P.
98US-0098750P.
98US-0098803P.
98US-0098821P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADE50266 standard; DNA; 18 BP
          03-DEC-2001; 2001US-0337429P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-DEC-2001; 2001US-00006116.
                                                                                                                                                                                                                                                                                                                                                                                                                                                 849 ACAGCGTCCTGGCTC 863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0098716P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 AGAGCGTCCTGGGTC 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                         13; Conservative
                                             CARMAN J.
NADLER S G.
BOWEN M.
                                                                                                                                          WPI; 2003-513754/48.
                                                                                NEUBAUER M.
                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US2003082626-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       01-SEP-1998;
01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
02-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADE50266;
                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                (NEUB/)
                                  (BRIM )
                                                       (NADL/)
(BOWE/)
                                             CARM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 896
                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADE50266
                                                                                                                                                                                                                                                                                                                                                                                                               Best
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
02-DEC-1999; 99WO-USC22551.

02-DAN-2000; 29WO-USC30095.

05-JAN-2000; 200WO-USC03019.

06-JAN-2000; 200WO-USC030119.

06-JAN-2000; 200WO-USC0376.

11-FEB-2000; 200WO-USC03765.

18-FEB-2000; 200WO-USC03765.

18-FEB-2000; 200WO-USC0376.

17-MAR-2000; 200WO-USC05841.

15-MAR-2000; 200WO-USC05884.

17-MAY-2000; 200WO-USC14942.

30-MAY-2000; 200WO-USC14941.

02-UNN-2000; 200WO-USC14941.

02-UNN-2000; 200WO-USC14941.
                                                                                                                                                                                     9805-01069028-
9805-0106919P-
9805-0106914P-
9805-0107832P-
9805-01077832-
9805-0108779-
9805-0108779-
9805-0108779-
9805-0108801P-
9805-0108801P-
9805-0108801P-
9805-0108807P-
9805-0108807P-
9805-0108807P-
9805-0108807P-
                                                                                                                                                                                                                                                                                                                                                 98US-0108850P
98US-0108851P
98US-0108858P
98US-0108904P
98US-0113296P
98US-0113236P
98US-0113236P
99US-0114233P
99US-014234P
99US-014274P
99US-014758P
99US-014758P
99US-014758P
99US-014758P
99US-014758P
99US-014758P
98US-0105002P.
98US-0105104P.
98US-0105266P.
98US-0105691P.
98US-0105681P.
98US-0105881P.
98US-0105881P.
98US-0106023P.
98US-0106023P.
98US-010603P.
98US-010603P.
98US-010603P.
98US-010603P.
98US-010603P.
98US-010603P.
                                                                                                                                                                                                                                                                                                                               18 - NOV-1998;

22 - DEC-1998;

30 - DEC-1998;

31 - DEC-1998;

32 - DEC-1998;

32 - DEC-1998;

33 - DEC-1998;

34 - DEC-1998;

35 - DEC-1998;
         21-0CT-1998
22-0CT-1998
26-0CT-1998
26-0CT-1998
27-0CT-1998
27-0CT-1998
27-0CT-1998
27-0CT-1998
27-0CT-1998
                                                                                              28-0CT-1998;
28-0CT-1998;
28-0CT-1998;
28-0CT-1998;
29-0CT-1998;
29-0CT-1998;
30-0CT-1998;
                                                                                                                                                                                     03-NOV-1998;
03-NOV-1998;
03-NOV-1998;
                                                                                                                                                                                                                         03-NOV-1998;
10-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                  17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-JUL-1999;
26-JUL-1999;
01-SEP-1999;
15-SEP-1999;
18-OCT-1999;
30-NOV-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24-AUG-2000;
                                                                                                                                                                                                                                                                                      17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                               17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                          16-APR-1999;
                                                                                                                                                                                                                03-NOV-1998;
                                                                                                                                                                                                                                                                                                        17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-JUN-1999
```

```
Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human lymphoid cell proliferative disorder gene CpG analysis oligo #232.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               one
                                                                                                                                                                                                                Hillan KJ;
                                                                                                                                                                                                                                                                                           Novel isolated PRO polypeptides useful for tissue typing, modulating biological activity of cell, as molecular weight markers in protein electrophoresis, for treating arthritis and tumors.
                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Detecting and differentiating between lymphoid cell proliferative disorders comprises contacting a target nucleic acid with at least or reagent that distinguishes between methylated and non-methylated CpG dinucleotides.
                                                                                                                                                                                                       Fong S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nimmrich I;
                                                                                                                                                                                                                                                                                                                                                                           ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   lymphoid cell proliferative disorder; methylation; methylated CpG dinucleotide; single nucleotide polymorphism; diffuse large B-cell lymphoma; mantle cell lymphoma; chronic lymphoma; echonic lymphocytic leukemia; small lymphocytic lymphoma; follicular lymphoma; diagnosis; prognosis; primer; ss.
                                                                                                                                                                                                     Ferrara N,
                                                                                                                                                                                                                  Gurney AL,
A, Tumas D,
                                                                                                                                                                                                                                                                                                                                               Match
Local Similarity 86.7%; Pred. No. 6.8e+02;
es 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                    Baker KP, Botstein D, Desnoyers L, Eaton DL, Fr
Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gu
Pan J, Panni NP, Roy MA, Smith V, Stewart TA,
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Maier
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ы
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Becker
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             m,
                                                    2001WO-US006666.
2001US-00872035.
2001WO-US017800.
2001US-00882636.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
               2000WO-US032678.
2000WO-US032678.
2001WO-US006520.
                                                                                                         2001WO-US019692.
2001WO-US021066.
2001WO-US021735.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25-NOV-2002; 2002WO-EP013265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-NOV-2001; 2001DE-01057491.
28-DEC-2001; 2001DE-01064501.
    2000WO-US030952
                                                                                                                                   09-JUL-2001; 2001WO-US021735
04-SEP-2001; 2001US-00946374
                                                                                                                                                                                                                                                                                                                                                                                                     788 CTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genc
                                                                                                                                                                                                                                                                                                                                                                                                                              1 crcrecreccacae 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADE84526 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Burger M, Caldwell C,
                                                                                                                                                                           (GETH ) GENENTECH INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-457621/43.
                                                                                                                                                                                                                                                                  WPI; 2003-765413/72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003044226-A2
08-NOV-2000; 2
10-NOV-2000; 2
01-DEC-2000; 2
10-MAR-2001; 2
01-MAR-2001; 2
01-JUN-2001; 2
01-JUN-2001; 2
20-JUN-2001; 2
20-JUN-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADE84526;
                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADE84526,
  ò
```

0;

9805-0099763P 9805-0099812P 9805-0099812P 9805-0099815P 9805-0100388P 9805-0100388P 9805-0100584P 9805-0100584P 9805-0100584P 9805-0100564P 9805-0100664P 9805-0100664P 9805-0100664P 9805-0100664P 9805-0100664P

98US-0100930P. 98US-0100848P. 98US-0100849P. 98US-0101014P.

```
10. SEP-1998
10. SEP-1998
10. SEP-1998
10. SEP-1998
10. SEP-1998
10. SEP-1998
11. SEP-1998
15. SEP-1998
15. SEP-1998
16. SEP-1998
16. SEP-1998
16. SEP-1998
17. SEP-1998
17. SEP-1998
17. SEP-1998
17. SEP-1998
17. SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-SEP-1998;
30-SEP-1998;
01-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22-0CT-1998;
26-0CT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-1998;
18-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-SEP-1998;
23-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-SEP-19
30-SEP-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        24-SEP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-SEP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-SEP-1
The invention relates to a method of detecting and differentiating between lymphoid cell proliferative disorders associated with at least cone gene and/or their regulatory regions in a subject by contacting a target nucleic acid in a biological sample obtained from the subject with at least one reagent or series of reagents that distinguish between card. The genes and/or their regulatory regions are preferably selected from MDRI, CSNKZB, EGR4, AR, CDK4, RBZ, CDC25A, GPID beta, MYDDI, CDB3, MYCLI, ELKI, ABLI, ABC, BCL2, CDH1, CDKNLB, CDKNLB, CDKNLB, CDKNLS, CSSTPD, HIC-1, MGWT, MLH1, MOS, MYC, PTEN, RBL2, TGFBR2, TDY3, CDKNLC, GSTSDeta, ESR1, APAFF, BAKL, BAX, MXC, Oligomers, peptide nucleic acid (PNA)-oligomers and/or isolated nucleic acids based on the sequences of the agenes are useful for detecting the methylation state of all the CC GG dinucleotides within one or more the sequences, or their complements, for determining the cytosine methylation state and or single nucleotide conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma, chronic lymphoma, They are also useful for detecting to a least two of the medical conditions such as diffuse large B-cell lymphoma, mantle cell lymphoma, chronic lymphoma, sequence conditions used as used as useful for detecting of a predisposition to, differentiation between subclasses, diagnosis, prognosis, treating and/or phone mantly conditions within the phone mantly condition
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; PCR; primer, secreted protein; transmembrane protein; PRO; tumour; immune response; cardiac insufficiency disorder; calcium flux; umbilical vein endothelial cell; bone disorder; cartilage disorder; arthritis; wound healing; diabetes; skeletal muscle cells; obesity; Berger disease; nephropathy; Schonlein-Henoch purpura; coeliac disease; dermatitis; herpetiformis; Crohn's disease; thalassaemia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            / Match 4.1%; Score 11.8; DB 1; Length 18; Local Similarity 86.7%; Pred. No. 6.8e+02; les 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 18 BP; 6 A; 0 C; 5 G; 7 T; 0 U; 0 Other;
Claim 30; SEQ ID NO 522; 448pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human PRO 1780 Taqman PCR primer #1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9805-0098749P.
9805-0098750P.
9805-0098803P.
9805-0098843P.
9805-0099536P.
9805-0099536P.
9805-0099598P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           916 TTATCATCACCACCA 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0098716P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13-DEC-2001; 2001US-00017527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADE21824 standard; DNA; 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 TTATCATCACTACTA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   above mentioned genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US2003082628-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-SEP-1998;
01-SEP-1998;
02-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-SEP-1998;
09-SEP-1998;
09-SEP-1998;
09-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-SEP-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local S:
Matches 13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADE21824;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADE21824
```

δ g

9805-0101071P 9805-0101472P 9805-0101472P 9805-0101473P 9805-0101473P 9805-0101473P 9805-0101473P 9805-0101473P 9805-0101741P 9805-0101741P

998;

986

98US-0102687P. 98US-0102965P. 98US-0103258P. 98US-0103449P. 98US-0103314P. 98US-0103315P.

19661

98US-0103633P. 98US-0103678P. 98US-0103679P. 98US-0103711P. 98US-0104257P. 98US-0104987P.

98US-0105000P. 98US-0105002P.

98US-0105266P. 98US-0105693P 98US-0105104P 98US-0105169P

98US-0103396P. 98US-0103401P.

98US-0103395P.

```
98US-01060629

98US-0106023P

98US-0106029P

98US-0106032P

98US-0106033P

98US-0106033P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0108801P.
98US-0108802P.
98US-0108802P.
98US-0108807P.
98US-0108867P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0108868P
98US-0108904P
98US-0113296P
98US-0114223P
99WS-0129674P
99US-014137P
                                                                                                                                                                                                                                                                                                                                            98US-0106248P.
98US-0106384P.
98US-0108500P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0108779P.
98US-0108787P.
98US-0108788P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      98US-0108849P.
98US-0108850P.
98US-0108851P.
98US-0108852P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US030095.
2000WO-US000219.
2000WO-US00376.
2000WO-US003565.
2000WO-US004342.
                      98US-0105807P.
98US-0105881P.
98US-0105882P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  98US-0106902P.
98US-0106905P.
98US-0106919P.
                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0106464P.
98US-0106856P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99WO-US020111.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000WO-US006884.
2000WO-US013705.
2000WO-US014042.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98US-0106932P.
98US-0106934P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0107783P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-0145698P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99WO-US028313.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           98US-0108848P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US021194.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      02-DEC-1999;
16-DEC-1999;
05-JAN-2000;
06-JAN-2000;
11-FEB-2000;
11-FEB-2000;
24-FEB-2000;
24-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15-MAR-2000;
17-MAR-2000;
30-MAY-2000;
30-MAY-2000;
02-JUN-2000;
23-AUG-2000;
24-AUG-2000;
08-NOV-2000;
01-DNOV-2000;
                                                                                 27-0CT-1998,
28-0CT-1998,
28-0CT-1998,
28-0CT-1998,
28-0CT-1998,
28-0CT-1998,
28-0CT-1998,
29-0CT-1998,
29-0CT-1998,
29-0CT-1998,
29-0CT-1998,
30-0CT-1998,
30-0CT-1998,
30-0CT-1998,
30-0CT-1998,
30-0CT-1998,
30-0CT-1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-NOV-1298;
18-NOV-1398;
18-NOV-1398;
18-NOV-1398;
18-NOV-1398;
18-NOV-1398;
18-NOV-1398;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-JUL-1999;
01-SEP-1999;
15-SEP-1999;
29-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-NOV-1998;
17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-NOV-1998;
17-NOV-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-NOV-1998
03-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-NOV-1998
17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-DEC-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-JAN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23 - JUN - 1999
\chi_{\mathcal{C}} \in \mathcal{C}_{\mathcal{C}} \times \mathcal{C}_{\mathcal{C}} \in \mathcal{C}_{\mathcal{C}} \in \mathcal{C}_{\mathcal{C}} \times \mathcal{C
```

```
Fong S;
Hillan KJ;
Watanabe CK;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                        or
                                                                                                                                                                                                                                                                                                                          The invention relates to an isolated PRO polypeptide (secreted or transmembrane protein) having at least 80% amino acid sequence identity
                                                                                                                                                                                                                 Novel secreted and transmembrane PRO polypeptides useful for treating cancers, kidney disorders, Crohn's disease, diabetes mellitus, hyperhypo-insulinemia, sports injuries and arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide SEQ ID NO 131451 for detecting SNP TSC0032808
                                                                                                      Gurney AL, I
A, Tumas D,
                                                                                        Ferrara N,
                                                                                                                                                                                                                                                                                                                                                                              / Match 4.1%; Score 11.8; DB 1; Length 18; Local Similarity 86.7%; Pred. No. 6.8e+02; nes 13; Conservative 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 131451; 29pp + Sequence Listing; German.
                                                                                      Baker KP, Botstein D, Desnoyers L, Eaton DL, Fe
Gao W, Goddard A, Godowski PJ, Grimaldi JC, Gui
Pan J, Paoni NF, Roy MA, Smith V, Stewart TA,
Williams PM, Wood WI;
                                                                                                                                                                                                                                                                                          Example 143; SEQ ID NO 453; 548pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABF31454 standard; DNA; 13 BP
09-JUL-2001; 2001WO-US021735.
04-SEP-2001; 2001US-00946374.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                                                                                                                                                                                      788 CTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       crcredrecceacae 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (EPIG-) EPIGENOMICS AG
                                                  (GETH ) GENENTECH INC.
                                                                                                                                                                              WPI; 2003-755105/71.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABF31454;
                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 899
                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
Ωþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
```

0

셤

```
This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABH99989 and ABI0010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             :S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                ٠.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide SEQ ID NO 140551 for detecting SNP TSC0035239.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.0%; Score 11.6; DB 1; Length 13; 91.7%; Pred. No. 4.9e+02; tive 1; Mismatches 0; Indels
                                                                                                                                                      / Match 4.0%; Score 11.6; DB 1; Length 13; Local Similarity 91.7%; Pred. No. 4.9e+02; nes 11; Conservative 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; SEQ ID NO 140551; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 13 BP; 6 A; 0 C; 2 G; 4 T; 0 U; 1 Other;
                                                                                                                       Sequence 13 BP; 1 A; 0 C; 8 G; 3 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ftp.wipo.int/pub/published_pct sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Berlin K;
                                                                                                                                                                                                                                                                                                                                                                             ABF40554 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                         924 ACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Piepenbrock C,
                                                                                                                                                                                                                                                                       13 RCCACCACCTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                   ABF40554;
                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Olek A,
                                                                                                                                                                                                                                                                                                                                        RESULT 900
                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                           ABF40554
                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                             g
```

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABE9989, and nthe invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide SEQ ID NO 140552 for detecting SNP TSC0035239.
                                                                                                          Oligonucleotide SEQ ID NO 131452 for detecting SNP TSC0032808.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.0%; Score 11.6; DB 1; Length 13; 91.7%; Pred. No. 4.9e+02; tive 1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 131452; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13 BP; 3 A; 8 C; 0 G; 1 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                              Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BP.
             BP.
                                                                                                                                                                                                                                                                                                                                                07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                               06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABF40555 standard; DNA; 13
             ABF31455 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               924 ACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 91.7
Les 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                              Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                               (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 RCCACCACCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              methylation status.
                                                                                                                                                                                                                                             WO200177384-A2.
                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-FEB-2002
                                                                               21-FEB-2002
                                                                                                                                                                                                                                                                              18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABF40555;
                                              ABF31455;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABF40555,
ABF31455
                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BXHXGXB
```

ö

0

Gaps

0

937 AGAGAATTTTAC 948 Conservative

ò

Local Similarity

Query Match

Matches

```
This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABH99999 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FKS06-binding protein 8; FKBP8; haplotyping; polymorphism; cancer; ss; immunosuppression; human; allele-specific oligonucleotide; ASO; primer.
                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, is
                                                                                                                                                                                                                                                                                                                                                               designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 11.6; DB 1; Length 13;
Pred. No. 4.9e+02;
1; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; SEQ ID NO 140552; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human FKBP8 allele-specific oligonucleotide (ASO) primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13 BP; 4 A; 2 C; 0 G; 6 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Mismatches
                                                                                                                                                                                                                                                                             Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAI67349 standard; DNA; 15 BP.
                                                                                                                                                                            06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.08;
                                                                                                                                                                                                              07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-MAR-2001; 2001WO-US009718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-MAR-2000; 2000US-0192125P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           937 AGAGAATTTTAC 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11; Conservative
                                                                                                                                                                                                                                                                             Piepenbrock C,
                                                                                                                                                                                                                                            (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12 AGAGAATTTAY
                                                                                                                                                                                                                                                                                                           WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                            methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200172965-A2
                                                                                                              WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        11-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                              Homo sapiens
                                                                                                                                               18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          04-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                             olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      염
```

0;

Gaps

0

```
The invention relates to haplotyping the FK506-binding protein 8 (38kD) (FKBPB) gene in an individual. The method involves determining the identity of the nucleotide pair at one or more polymorphic sites selected from P1 to P26 (described in the specification). The invention is useful to improve the efficiency and reliability of several steps in the discovery and development of drugs for treating diseases associated with FKBPB activity, for example immunosuppression and cancer. Sequences AAI67300-351 represent allele-specific oligonucleotide (ASO) primers for detecting FKBPB gene polymorphisms. Note: some of these sequences (alternate sequence Id numbering-31, 33, 35. .81) differ from those with the same seq Id No.s indicated in the disclosure
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; primer; ss; cytochrome P450; subfamily XXVIIB; 25-hydroxyvitamin D-1-alpha-hydroxylase; CYP27B1; isogene; hydroxylation; 25-hydroxyvitamin D-1-alpha-hydroxylase; CYP27B1; isogene; hydroxylation; 25-hydroxyvitamin D3; Z5(DH)D3; calcitriol; lalpha,25(DH)2D3; kidney; nuclear receptor; vitamin D; VDR; calcium homeostasis; cellular differentiation; SNP; single nucleotide polymorphism; pseudovitamin D-dependent rickets type I; haplotyping; genotyping; antibody; antisense; cancer; diabetes; inflammatory disorder; chromosome 12q13.3-q4; antiinflammatory; ASO; allele specific oligonucleotide.
                                                                                                                                  New haplotypes of the FK506-binding protein 8 gene, useful for genotyping that gene in individual and to design new therapy for associated disease such as immunosuppression and cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
0
                                                    В;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 15;
                                                  Koshy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ASO primer, #8, for detecting CYP27B1 gene polymorphisms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                    Kliem SE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 1 A; 5 C; 2 G; 6 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 11.6; DB 1;
Pred. No. 5.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shah N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1; Mismatches
                                                Choi JY,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Monroe G, Kazemi A,
                                                                                                                                                                                                       Claim 15; Page 79; 98pp; English.
                 (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                  Bentivegna SC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-NOV-2000; 2000US-0245797P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-NOV-2001; 2001WO-US047438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABS64891 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 91.7
Matches 11; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      895 TTCTCAGCTTCT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 TTCTCAGCTTCY 14
                                                                                                WPI; 2001-626261/72.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-643397/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200262820-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bieglecki KM,
                                                    Anastasio AE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-NOV-2002
                                                                  Stephens JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABS64891;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABS64891,
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

New genetic variants of the human polypeptide 1 (CYP27B1) gene, useful for treating disorders associated with aberrant expression or overproduction of TNF e.g. cancer, diabetes or inflammatory disorders. Claim 14; Page 14; 64pp; English

The invention discloses an isolated polymorphic polynucleotide comprising a coding sequence for a cytochrome P450, subfamily XXVIIB (25-0) a coding sequence for a cytochrome P450, subfamily XXVIIB (25-0) a coding sequence for a cytochrome P450, subfamily XXVIIB (25-0) a catalyses the hydroxylation of 25-hydroxyvitamin D3 [25(BH)D3] to catalyses the hydroxylation of 25-hydroxyvitamin D3 [25(BH)D3] to calcitriol (lalpha,25(GH)2D3) in the proximal tubule of the kidney. The binding of calcitriol to the nuclear receptor for the hormonally active form of vitamin D (VDR) activates the receptor with subsequent regulation of physiological events such as calcium homeostasis and cellular differentiation. The various polymorphisms in the CYP27B1 gene may cause pseudovitamin D-dependent rickets type I. The polymorlocide is useful for haplotyping, genotyphng, predicting a haplotype pair, identifying an association between a trait and at least one haplotype pair, identifying an association between a trait and at least one haplotype or haplotype pair association between a trait and at least one haplotype or haplotype pair. The CYP27B1 gene. The polymorphism in the CYP27B1 groundleotide is useful for raising a polymorphism in the CYP27B1 groundleotide encoding the isolated polymorleotide. The pharmaceutical composition, comprising the isolated polymorleotide or another composition. Comprising the isolated polymorleotide or another composition. Comprising the isolated polymorleotide or another compound that inhibits expression of the CYP27B1 isogene, is useful for treating disorders affected by expression or function of the CYP27B1 isogene e.g. cancer, diabetes or inflammatory disocrders. The sequences presented in CAB64884 ABS648897 are the allele specific oligonucleotide (ASO) primers which were used for detecting CYP27B1 gene polymorphisms. The CYP27B1

Sequence 15 BP; 3 A; 4 C; 6 G; 1 T; 0 U; 1 Other;

Gaps ·, 4.0%; Score 11.6; DB 1; Length 15; 31.7%; Pred. No. 5.9e+02; ve 1; Mismatches 0; Indels Best Local Similarity 91.7%; Matches 11; Conservative Query Match

0

856 CCTGGCTCCAGT 867 14 screecrecaer 3 δ qq

RESULT 905 AAL39576

AAL39576 standard; DNA; 15 BP. AAL39576; HANDER STANDER STANDER

(first entry) 05-SEP-2002

SSTR4 gene polymorphism detecting primer SEQ ID No 23.

Gene therapy, SSTR4 isogene expression modulator; hormone secretion; somatostatin receptor 4; SSTR4; single nucleotide polymorphism; cancer; gene therapy; SSTR4 isoform; PCR; primer; ss.

Homo sapiens

WO200226766-A2.

04-APR-2002.

27-SEP-2001; 2001WO-US030410.

27-SEP-2000; 2000US-0235826P

(GENA-) GENAISSANCE PHARM INC.

'n Koshy Bieglecki KM, Choi JY, Kliem SE,

WPI; 2002-405043/43

New isolated polynucleotide, polymorphic variant of somatostatin receptor 4 gene, useful for expressing somatostatin receptor 4 protein isoform used in drug screening techniques.

Claim 14; Page 14; 83pp; English.

The invention is an isolated polynucleotide having a somatostatin creeptor 4 (SSTR4) isogene that is one of 13 somatostatin genes as given in the specification, where each somatostatin gene has specific regions of a fully defined sequence of 9190 nucleotides as given in the specification, and is defined by polymorphisms at positions 3922, 4723, 4784, 4835, 4814, 4921, 4948, 4986, 5216, 5329 or 5411. The solated polypeptide with a candidate agent and assaying for binding activity. The isolated polymorloscide is useful for studying contacting the polymorphism and haplotype data is useful for use in screening for candidate drugs to treat diseases related to SSTR4 protein for use in screening for candidate and haplotype data is useful for validating whether SSTR4 is a suitable target for drugs of cancer and disorders related to defects in hormone secretion, screening for such drugs and realso useful in gene therapy. The isolated polymorpide is useful in subsoluted the effect of variation on the biological activity of SSTR4 as well as on the binding affinity of candidate drugs targeting SSTR4 for treatment of cancer and disorders related to defects in hormone secretion. The isolated polymorphide is useful in a variety of drug screening assays to identify agents that bind specifically to all known screening assays to identify agents that bind specifically to all known structure and disorders related to defects in hormone candidate drugs targeting the SSTR4 protein. Predicting a maplotype pair contracts. between susceptibility to a disease, staging of a disease, or response to a drug. This polynucleotide sequence represents a preferred primer for detecting SSTR4 gene polymorphisms relating to the invention

Sequence 15 BP; 1 A; 3 C; 2 G; 8 T; 0 U; 1 Other;

Gaps 0; 4.0%; Score 11.6; DB 1; Length 15; 91.7%; Pred. No. 5.9e+02; ive 1; Mismatches 0; Indels 11; Conservative Query Match Best Local Similarity Best Loca Matches

0

834 ITTICITCIG 845 TTTTCTTCTCYG 15

g

à

RESULT 906 ABL39417

ABL39417 standard; DNA; 15 BP.

ABL39417; 

(first entry) 22-APR-2002

Human ETFB allele-specific oligonucleotide probe 4.

Human; electron-transfer flavoprotein beta polypeptide; ETFB; electron acceptor; mitochondrial matrix; glutaric acidaemia type II; novel polymorphism; ETFB genotype; 85; GAII; ETFB haplotype; transgenic animal; primer; probe; chromosome 19q13; primer-extension oligonucleotide; single nucleotide polymorphism; SNP.

Homo sapiens.

WO200202580-A2

10-JAN-2002.

05-JUL-2001; 2001WO-US021306.

05-JUL-2000; 2000US-0215984P.

(GENA-) GENAISSANCE PHARM INC.

**5**A

WPI; 2002-393978/42

Koshy B;

```
Human HTR5A gene allele-specific oligonucleotide probe #20.
                                                                                                                                                     represent claimed BTFB primer-extension oligonucleotides
                                                                                                                                                               Sequence 15 BP; 0 A; 5 C; 2 G; 7 T; 0 U; 1 Other;
     Kazemi A,
                                         Claim 17; Page 14; 143pp; English.
     Bieglecki KM,
                                                                                                                                                                                                                           ABK72358 standard; DNA; 15 BP
                                                                                                                                                                            91.7%;
                                                                                                                                                                  (first entry)
                                                                                                                                                                                           833 CITITCTICIC 844
                                                                                                                                                                                                    CTTTYCTTCTCT 15
              WPI; 2002-154722/20.
     Bentivegna SC,
                                                                                                                                                                                                                                                                                                 WO200222887-A1
                                                                                                                                                                                                                                              30-JUL-2002
                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                          21-MAR-2002
                                                                                                                                                                                                                                    ABK72358;
                                                                                                                                                                                                                  RESULT 907
                                                                                                                                                                                                                     d
                                                                                                                                                                                           à
```

method for haplotyptamine (serotomin) receptor 50 (HTRSA). A method for haplotyping the HTRSA gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the one more polymorphic sites and determining whether one of the copies of the gene is defined by one of the HTRSA haplotypes given in the specification or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype pair in a population exhibiting the trait with the frequency of the HTRSA gene can be identified by comparing the frequency of the haplotype pair in a population exhibiting the trait with the frequency of the haplotype pair in a population exhibiting the trait with the frequency of the haplotype or haplotype pair in a population indicates the trait is associated with the haplotype or haplotype pair. HTRSA and its corresponding DNA are used for studying the expression and contact of HTRSA activity, such as neurological disorders, including depression and epilepsy. Sequences ABR72239-ABR7238 represent allele-Primer, PCR, amplification, exon 2; human, BRCA1; BRCA2; allele, probe, hybridisation; detection; mutation; breast; ovarian; cancer; ss. invention relates to single nucleotide polymorphisms in the gene Novel genetic variants of 5-Hydroxytryptamine (Serotonin) Receptor isogenes, useful for improving efficiency and reliability in drug development for treating neurological diseases. 4.0%; Score 11.6; DB 1; Length 15; 91.7%; Pred. No. 5.9e+02; ive 1; Mismatches 0; Indels Wild type BRCA1 exon 20 allele-specific probe 5382WT-2. Sequence 15 BP; 2 A; 6 C; 5 G; 1 T; 0 U; 1 Other; Claim 17; Page 14; 134pp; English AAX34383 standard; DNA; 19 BP 98WO-US020256. 97US-0059729P (first entry) 776 TGAGGGCAGCCC 787 11; Conservative TGAGGGCRGCCC 4 ONCO-) ONCORMED INC. Best Local Similarity polymorphisms WO9915704-A1. Homo sapiens 23-SEP-1998; 23-SEP-1997; 06-JUL-1999 01-APR-1999 Synthetic 15 AAX34383; Query Match Matches AAX34383/c 셤 à The invention comprises DNA, cDNA and protein sequences of the human electron-transfer flavoprotein, beta polypeptide (ETFB) gene (located on chromosome 19413.4-13.4). The invention specifically relates to the identification of 27 novel polymorphic sites within the ETFB gene.

Electron-transfer flavoprotein (ETF) is an obligatory electron acceptor for nine primary flavoprotein dehydrogenases and is located in the mitochondrial matrix. ETF is composed of an alpha (ETFA) and a beta mitochondrial matrix. ETF is composed of an alpha (ETFA) and a beta mitochondrial respiratory chain by ETF are transferred to the mitochondrial respiratory chain by ETF are transferred to the mitochondrial respiratory chain by ETF dehydrogenases (ETFBA).

Therefore ETFB is a pharmaceutically-important gene in the treatment of Therefore ETFB is polymorphisms identified in the invention are useful for genotyping and haplotyping the ETFB gene of an individual. The ETFB protein and nucleic acids of the invention are useful for studying the expression and function of ETFB in vivo. The ETFB protein and nucleic acids are also useful for testing the efficacy of therapeutic agents and compounds for glutaric acidaemia type II. The nucleic acids of the invention are useful in the production of a transgenic animal expressing the ETFB gene. Nucleic acids ABL39441-ABL39444 represent claimed ETFB allele-specific probes. Nucleic acids ABL39441-ABL39444 represent claimed ETFB cransent claimed ETFB and expressing contractors and expressing allele-specific probes. Nucleic acids ABL39441-ABL39444 represent claimed ETFB cransent claimed expressing contractors and expressing allele-specific probes. Nucleic acids ABL39441-ABL39444 represent claimed expressing contractors and expressing allele-specific probes. Nucleic acids ABL39441-ABL39444 represent claimed animal expressing contractors and expressing allele-specific probes. Nucleic acids ABL39441-ABL39444 represent claimed animal expressing contractors and animal expressing contractors and expressing and a ö Novel isolated human electron-transfer-flavoprotein, beta polynucleotide, useful for therapeutic purposes, for studying the expression and function of the polynucleotide, and for expressing the flavoprotein. Gaps Human; 5-hydroxytryptamine receptor 5A; HTR5A; serotonin; probe; ss; neuroprotective; neurological disease; depression; epilepsy; gene therapy; single nucleotide polymorphism; haplotype pair; chromosome 7q36.1. ö 4.0%; Score 11.6; DB 1; Length 15; 91.7%; Pred. No. 5.9e+02; ive 1; Mismatches 0; Indels 17-SEP-2001; 2001WO-US029210.

ö

Gaps

. 0

Detection of BRCA1 and BRCA2 gene mutations in a single hybridization

Rabin MB, Farrow J;

WPI; 1999-254727/21.

step.

Tirrell C;

Sanchis A,

Koshy B,

Kazemi A,

(GENA-) GENAISSANCE PHARM INC

15-SEP-2000; 2000US-0233051P.

·.

.; 0

Gaps

..

Length 19; Indels

4.0%; Score 11.6; DB 1; 77.8%; Pred. No. 7.7e+02; Mismatches

; 0

BP.

20

ď

The sequence represents PCR primer IFN-gamma sense, used to follow the progress and/or treatment of multiple sclerosis (MS). This is done by determining the amount of following cytokines, interlewin (IL)-18, IL-12P40, interferon (IFN)-gamma, IL-4, IL-10, transforming growth factor (TGR)-beta, IL-12Rbetal, IL-12Rbetal and/or IL-12p35 of the first biological sample obtained from person suffering from or suspected to suffer from MS, and optionally comparing it with a reference value. This method is useful for determining the success rate of treatment of MS by discriminating between patients with MS (regardless of the clinical subtrypes) and healthy controls, on the basis obtained from person suffering from or suspected to suffer from MS. The method enables a clinical subfrant to be able to determine or further substantiate the clinical subtype of patient quickly and accurately, and immediately upon the first The invention relates to the use of allele-specific oligonucleotides AAX34376-X34391 as probes for the detection of mutant BRCA1 and BRCA2 genes. The probes are immobilised on a membrane and labelled target nucleotide sequences, which hybridise to the probes, are detected after single hybridization step. The method and allele-specific oligonucleotides are used to detect gene mutations that predispose individuals to breast and ovarian cancer Monitoring progress and/or treatment of multiple sclerosis by comparing levels of interleukin (IL)-18, IL-12p40, interferon-gamma, IL-4, IL-10, transforming growth factor-beta, IL-12Rbetal, 2 and/or IL-12p35. primer; multiple sclerosis; MS; therapeutic; cytokine; interleukin; (IL)-18; IL-12p40; interferon-gamma; IFN-gamma; IL-4; IL-10; IL-12p35; transforming growth factor beta; TGF-beta; IL-12Rbeta1; IL-12Rbeta2; PCR primer IFN-gamma sense used to follow progress/treatment of MS. Sequence 19 BP; 8 A; 5 C; 5 G; 1 T; 0 U; 0 Other; Van Boxel- Dezaire AHH, Disclosure; Page 11; 43pp; English. (NEDE ) NEDERLANDSE ORG TOEGEPAST. Claim 10; Page 16; 44pp; English. 875 CTTTCCTGAGATGCACTT 892 19 crerccreckhrrcrcrr 2 28-OCT-1999; 99EP-00203551. 30-MAR-2000; 2000EP-00201167. 27-OCT-2000; 2000EP-00203765 (first entry) Conservative AAS10705 standard; DNA; WPI; 2001-443845/48 Local Similarity nes 14; Conserv Nagelkerken AM, diagnostic; ss Homo sapiens. EP1114998-A2 24-OCT-2001 11-JUL-2001 AAS10705; Query Match RESULT 909 Best Loca Matches AAS10705/ XXXDCCCCCCXXX ð q

Polman CH;

```
The invention comprises antisense oligonucleotides targeted to the human damage specific DNA binding protein 2 (DDB2 - also known as p48) gene, located on chromosome 11. DDB2 is a subunit of the the DDB protein which is believed to be a negative regulator of the E2F transcription factor. The antisense oligonucleotides of the invention are used to treat a sperson suspected of having or being prone to a disease or condition associated with DDB2/P48 expression. The present DNA sequence represents a human DDB2/P48 antisense oligonucleotide of the invention. NOTE: The present DNA sequence is a 2'-O-methoxyethyl gapmer and contains a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   οĘ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Antisense oligonucleotide which specifically hybridizes with a region a nucleic acid encoding human Damage-specific DNA binding protein p48, useful for treating diseases and conditions associated with p48
                                                                                                                                                                                                                                                                                                                                                   Human; ss; antisense oligonucleotide; antisense therapy; PCR; primer; damage specific DNA binding protein 2; DDB2; p48; chromosome 11; DDB; E2F transcription factor; p48 expression-related disease; DDB2 expression-related disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.0%; Score 11.6; DB 1; Length 20; 77.8%; Pred. No. 8.2e+02;
                                                     4.0%; Score 11.6; DB 1; Length 20; 77.8%; Pred. No. 8.2e+02; ive 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 20 BP; 3 A; 7 C; 5 G; 5 T; 0 U; 0 Other;
                      Sequence 20 BP; 5 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                         Human DDB2 antisense oligonucleotide 27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 3; Col 45-46; 36pp; English.
                                                                                                                        971
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCCTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         m
                                                                                                                                                      m
                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-DEC-2000; 2000US-00732199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-DEC-2000; 2000US-00732199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCATCTGGAGCCAGGAG
                                                                                                                        954 AAGAGCCAAATTGACTCT
                                                                                                                                                   AGGAGACAATTTGGCTCT
                                                                                                                                                                                                                                 AAL43528 standard; DNA; 20
                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                    phosphorothioate backbone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (ISIS-) ISIS PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2002-424788/45.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wyatt J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
Matches 14; Conserv
                                                                            Local Similarity
onset of symptoms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US6379960-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                         14;
                                                                                                                                                                                                                                                                                             02-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Popoff I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                      20
                                                                                                                                                                                                                                                                AAL43528;
                                                            Query Match
                                                                                                                                                                                                    RESULT 910
                                                                                            Matches
                                                                                                                                                                                                                    AAL43528/
                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         셤
SXS
                                                                                                                                                      Op.
                                                                                                                           δ
```

0

```
15-OCT-2001; 2001US-00977797
                                                                            11-FEB-1999
                                                                                                                                                             Watkins JD,
                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADC82856;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 913
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                     The invention comprises antisense oligonucleotides targeted to the human damage specific DNA binding protein 2 (DDB2 - also known as p48) gene, located on chromosome 11. DDB2 is a subunit of the the DDB protein which is believed to be a negative regulator of the E2F transcription factor. The antisense oligonucleotides of the invention are used to treat a person suspected of having or being prone to a disease or condition associated with DDB2/p48 expression. The present DNA sequence represents a human DDB2/p48 antisense oligonucleotide of the invention. NOTE: The phosphorothioate backbone
                                                                                                                                                                                                                                                                                                                                 Antisense oligonucleotide which specifically hybridizes with a region of a nucleic acid encoding human Damage-specific DNA binding protein p48, useful for treating diseases and conditions associated with p48
                                                                                                          damage specific DNA binding protein 2; DDB2; p48; chromosome 11; DDB; B2F transcription factor; p48 expression-related disease; pbBb2 expression-related disease; phosphorothioate backbone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tumour antigen; antibody; CDR; complementarity determining region;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             for Tumour antigen antibody light chain CDR clone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.0%; Score 11.6; DB 1; Length 20; 77.8%; Pred. No. 8.2e+02; Live 0; Mismatches 4; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 20 BP; 5 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                      Human DDB2 antisense oligonucleotide 26.
                                                                                                                                                                                                                                                                                                                                                                                    Claim 3; Col 45-46; 36pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              785 CCCCTCTGGTGCCAAGAG 802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                            AAL43527 standard; DNA; 20 BP
                                                                                                                                                                                                                                06-DEC-2000; 2000US-00732199
                                                                                                                                                                                                                                                   06-DEC-2000; 2000US-00732199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCATCTGGAGCCAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX28247 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          14; Conservative
                                                                                                                                                                                                                                                                       (ISIS-) ISIS PHARM INC
                                                                                                                                                                                                                                                                                                             WPI; 2002-42478B/45
                                                                                                                                                                                                                                                                                           Wyatt J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                          US6379960-B1.
                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-JUN-1999
                                                                   02-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PCR primer
                                                                                                                                                                                                                                                                                                                                                                 expression
                                                                                                                                                                                                                                                                                           Popoff I,
                                                AAL43527;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAX28247;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
         RESULT 911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 91
                 AAL43527/
                             à
```

```
This sequence is a primer for DNA encoding a light chain complementarity determining region (CDR) from a tumour antigen specific antibody. The invention relates to a method for identifying a binding molecule having selective affinity for a ligand comprising: (a) selectively immobilising a diverse population of binding molecules to a solid support; (b) simultaneously contacting the diverse population immobilised on the solid support with 2 or more ligands; and (c) determining at least one binding molecule which selectively binds to one or more of the ligands. The method allows for the rapid and efficient methods for the identification of binding molecules which exhibit selective affinity for one or more pligands of interest. They are used particularly for identifying tumourspecific binding polypeptides which can be used as targeting agents for cancer therapy that minimises impact on non-tumour tissues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Identifying binding molecules for ligands, particularly tumour antigens -by selectively immobilising a population of binding molecules to a solid support and screening for binding to two or more ligands.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Binding molecule; selective affinity; ligand; antibody library; anti-immunoglobulin reagent; phage expressed antibody library; tumour antigen; complementarity determining region; CDR; human disease; cellular pathology; human; Fab; light chain; sequencing; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequencing primer #2 for human Fab light chain (CDR region) DNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
binding molecule identification, tumour-specific binding polypeptide; cancer therapy; light chain; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 11.6; DB 1; Length 21; Pred. No. 8.6e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 5; Page 54; 80pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   77.8%;
                                                                                                                                                                                                                                                                                                                                                                      98WO-US016280
                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-00905825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wu H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        868 TGGAACACTTTCCTGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4 rereacacircrecresea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADC82856 standard; DNA; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 4.0
Best Local Similarity 77.8
Matches 14; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Huse WD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-153951/13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US2003044772-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (IXSY-) IXSYS
                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                       WO9906834-A2
                                                                                                                                                                                                                                                                                                                                                                      04-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                              04-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JAN-2004
```

0;

```
The present invention relates to a method for identifying a binding molecule having selective affinity for a ligand. The method involves providing a solid support coated with an anti-immunoglobulin reagent, and a phage expressed antibody library, and contacting the solid support to the phage expressed antibody library. The invention also discloses a method for identifying an antibody having selective affinity for a tumour, and a complementarity determining region (CDR) of an antibody selective for a tumour antigen. The methods of the invention are useful for identifying a binding molecule having selective affinity for a ligand, for the discovery of specific reagents for diagnosis and treatment of human diseases, for identifying binding molecules to, for example tumour cells or other cellular pathologies for the selective targeting of therapeutic agents, or for the identification of binding molecules to normal or diseased tissues for the selective targeting of cor example diagnostic agents such as imaging reagents. The methods are methods allow the simultaneous screening of multiple binding molecules adminity for one or more ligands of interest. The methods allow the simultaneous screening of multiple binding molecules allow the simultaneous screening of multiple binding molecules can be simulative or function of either the binding molecules can be simulative with such solutions of binding molecules can be simulated screening against diverse populations of binding molecules can be simulated the second of the canding molecules of the canding screening against diverse populations of binding molecules can be simulated the second of the canding molecules can be simulated the second of the canding molecules can be simulated to the ligand of the canding second canding the distriction of either the binding molecules can be simulated to the canding the ca
                                                                                                                                                                                                                                                      Identifying binding molecules having selective affinity for ligands for discovering reagents for treating diseases, by contacting solid support coated with anti-immunoglobulin reagent to a phage expressed antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ligands to rapidly identify numerous molecules exhibiting a desired binding specificity. The methods provide improved sensitivity and specificity of detection through the selective immobilisation of the binding molecule population on a solid support. The present sequence represents a sequencing primer used in the examples of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 21 BP; 3 A; 7 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 11.6; DB 1;
Pred. No. 8.6e+02;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   amide; antisense; peptide nucleic acid; PNA; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligoribonucleotide with amide backbone.
                                                                                                      (MOLE-) APPLIED MOLECULAR EVOLUTION.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                          Example 5; Page 14; 26pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           868 IGGAACACTITICCIGAGA 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rereacacrerecrees 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.08;
                        97US-0113667P.
98US-00129026.
                                                                                                                                                    Ħ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV00738 standard; RNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity 77.8
Matches 14; Conservative
                                                                                                                                                    Watkins JD, Huse WD,
                                                                                                                                                                                                     WPI; 2003-625402/59.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-MAR-1998
                                                04-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV00738;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV00738/c
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
```

```
New oligonucleotide analogues are provided which have an amide backbone. They are useful as therapeutic antisense molecules which bind to mRNA and thereby inhibit production of the protein encoded by the mRNA. They are stable, water-soluble and nuclease-resistant. The present sequence represents a specific example of the analogues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
             the internucleoside bonds are amide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                           RNA oligo:nucleotide analogues with amide linkages - useful as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oligonucleotide SEQ ID NO 147143 for detecting SNP TSC0037153.
                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                           [교
                                                                                                                                                                                                                                                                                Page 30; 37pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Berlin K;
                                                                                                                                                         (HOFF ) HOFFMANN LA ROCHE & CO AG
                                                                                                                                                                                                                                                         therapeutic anti:sense molecules.
/*tag= a
/note= "all of t
linkages"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABF47146 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-APR-2001; 2001WO-IB000713.
                                                                                                                                  94US-00347541.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-APR-2000; 2000DE-01019173.
                                                                                                       95EP-00118193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        830 TCTCTTTTCTTCT 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13 rererererier 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ပဲ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Piepenbrock
                                                                                                                                                                                                                WPI; 1996-261572/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
nes 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200177384-A2
                                                                                                                                                                                     Li W, Tam S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                       18-NOV-1995;
                                                                                                                                30-NOV-1994;
                                                     EP714907-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-FEB-2002
                                                                              05-JUN-1996.
                                                                                                                                                                                                                                                                                Example 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABF47146;
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 915
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABF47146/
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              셤
```

; 0

Gaps

0;

modified base

Length 21; 4; Indels

ö

was obtained in electronic format from WIPO at

```
.;
0
                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomers are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABE99989, ABF00010-ABE99989, ABF00010-AB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oligonucleotide SEQ ID NO 225397 for detecting SNP TSC0054945.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; iive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 225397; 29pp + Sequence Listing; German.
                                             Claim 1; SEQ ID NO 147143; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 13 BP; 4 A; 1 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABH25420 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                942 ATTTTACGCAAGA 954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTTACGCAACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         methylation status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABH25420;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 93
ABH25420
ABH25420
ABH25420
AN AC ABH3
AN CABH3
AN CABH3
AN AC 22-1

ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This invention describes novel oligonuclectide primers or peptide nucleic acid (RNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ligonucleotides, useful for diagnosis and cell typing, it to detect single-nucleotide polymorphisms and cytosine
                                                                                                                  .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .,
                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide SEQ ID NO 213753 for detecting SNP TSC0052036.
                                                                              3.9%; Score 11.4; DB 1; Length 13; 22.3%; Pred. No. 5.3e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 213753; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                              Sequence 13 BP; 3 A; 0 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Seguence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 11.4; DB 1;
Pred. No. 5.3e+02;
0; Mismatches 1;
            ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    was obtained in electronic format from Wl
ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Berlin K;
                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                92.3%;
                                                                                                                                                                                                                                                                          ABH13776 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              967 ACTCTCTAAATCT 979
                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                    979 TGGTGTATGGGTA 991
                                                                                                                                                                                      1 TGGTGTATGGGAA 13
                                                                                                Local Similarity 92.3
les 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Set of oligonucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13 ACTCTCTTAATCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            methylation status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200177384-A2
                                                                                                                                                                                                                                                                                                                                            22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-OCT-2001
                                                                                  Query Match
                                                                                                                                                                                                                                                                                                          ABH13776;
                                                                                                                  Matches
                                                                                                                                                                                                                                                        ABH13776/c
                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
25×38
                                                                                                                                                      à
                                                                                                                                                                                 d
```

```
central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                        WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200177384-A2
                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-FEB-2002
                                                                                                                                 18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABC63553;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABC63553
  Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PART OF THE PROPERTY OF THE PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABE99899 and metabolic disorders. The represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleatide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
                                                                                                                                                                                              Oligonucleotide SEQ ID NO 257783 for detecting SNP TSC0006698.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide SEQ ID NO 43251 for detecting SNP TSC0012814.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; SEQ ID NO 257783; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13 BP; 7 A; 0 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 11.4; DB 1;
Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABC43234 standard; DNA; 13 BP.
                                                                ABH57806 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTACTTCTCAGCT 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                      22-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTACTICICATCT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Olek A, · Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                           WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                       18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   891
                                                                                                            ABH57806;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABC43234;
                    RESULT 918
ABH57806/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABC43234
                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ₽
```

```
·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 tepseent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide SEQ ID NO 63570 for detecting SNP TSC0016788.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 1; SEQ ID NO 43251; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 13 BP; 3 A; 0 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                     Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
06-APR-2001; 2001WO-IB000713.
                                                                             07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABC63553 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 922 TCACCACCACCT 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13 reaccacercer 1
                                                                                                                                                                                                                                     Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EPIG-) EPIGENOMICS AG.
                                                                                                                                                       (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                              WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
les 12; Conserv
```

```
ŏ
  g
```

ABH45911 standard; DNA; 13 ABH45911; RESULT 922 ABH4591 8\$6666666668 ò 엄 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, coincamers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine Claim 1; SEQ ID NO 63570; 29pp + Sequence Listing; German. Sequence 13 BP; 5 A; 5 C; 0 G; 3 T; 0 U; 0 Other; ftp.wipo.int/pub/published_pct_sequences Berlin K; Piepenbrock C, methylation status. WPI; 2001-657177/75 Olek A,

Gaps . 0 Score 11.4; DB 1; Length 13; Pred. No. 5.3e+02; 1; Indels 0; Mismatches 3.9%; 915 ATTATCATCACCA 927 1 Arcarcarcacca 13 12; Conservative Local Similarity Query Match Matches

ABF40780 standard; DNA; 13

BP.

21-FEB-2002 ABF40780 ABF40780/c

Oligonucleotide SEQ ID NO 140777 for detecting SNP TSC0035273.

(first entry)

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2

18-OCT-2001

06-APR-2001; 2001WO-IB000713

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG

Berlin K; Olek A, Piepenbrock C,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 140777; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)

```
0;
                         oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, aardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99889, ABF00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from MIPO at
cytosine methylation status in chemically pretreated genomic DNA. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1; Indels
                                                                                                                                                                                                                                                                                                                                                                                           Sequence 13 BP; 1 A; 0 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 11.4; DB 1;
Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                         ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         923 CACCACCACCTC 935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13 CACCACCACTC 1
```

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic. Oligonucleotide SEQ ID NO 245888 for detecting SNP TSC0060075 

BP

(first entry)

22-FEB-2002

;

Homo sapiens.

WO200177384-A2

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Berlin Piepenbrock C, olek A,

ĸ

WPI; 2001-657177/75

set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 245888; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences

Sequence 13 BP; 0 A; 3 C; 0 G; 10 T; 0 U; 0 Other;

rng.res

```
ABF40781;
             à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      í
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and Oytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                     Oligonucleotide SEQ ID NO 54410 for detecting SNP TSC0014925.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.4; DB 1; Length 13;
Pred. No. 5.3e+02;
0; Mismatches 1; Indels
          Score 11.4; DB 1; Length 13;
Pred. No. 5.3e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 54410; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 13 BP; 3 A; 6 C; 1 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                            Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABF40781 standard; DNA; 13 BP.
                                                                                                                            .393/c
ABC54393 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                           06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%;
                                                                                                                                                                                                                                                                                                                                                                 07-APR-2000; 2000DE-01019173.
             3.9%;
                     92.3%;
                                                       832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           735 TAGGACTTGGTAG 747
                                                                                                                                                                                (first entry)
Query Match
Best Local Similarity 92.3-
Best Local 2; Conservative
                                                                             rcrrrrcrrrcr 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGGACGTGGTAG 1
                                                                                                                                                                                                                                                                                                                                                                                                            Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                       (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                               WO200177384-A2
                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                21-FEB-2002
                                                                                                                                                                                                                                                                                                                     18-OCT-2001
                                                                                                                                                           ABC54393;
                                                                             Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13
                                                                                                                                                                                                                                                                                                                                                                                                              olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 924
                                                                                                               RESULT 923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                           ABC54393,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABF40781
                                                                                                                                                           à
                                                                             g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
```

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             typing, i
cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                 Oligonucleotide SEQ ID NO 140778 for detecting SNP TSC0035273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Oligonucleotide SEQ ID NO 151677 for detecting SNP TSC0038319.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 1; SEQ ID NO 140778; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Set of oligonuclectides, useful for diagnosis and cell designed to detect single-nucleotide polymorphisms and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 13 BP; 4 A; 8 C; 0 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4; DB 1;
92.3%; Pred. No. 5.3e+02;
live 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABF51680 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    923 CACCACCACCTC 935
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CACCACCACACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                 WO200177384-A2
                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                      18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
```

ó,

```
SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide SEQ ID NO 136116 for detecting SNP TSC0033992.
                                                                                                                                                                                                                                                                                                                                 ABF36119 standard; DNA; 13 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                               921 ATCACCACCC 933
                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                             13 ATCACCACTACCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (EPIG-) EPIGENOMICS AG
                                                 (EPIG-) EPIGENOMICS AG
                                                                             WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-657177/75
                                                                                                           methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                               21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                     18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                ABF36119;
                                                                olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             olek A,
                                                                                                                                                                                                                                                                                                                    RESULT 926
                                                                                                                                                                                                                                                                                                                          g
```

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                Claim 1; SEQ ID NO 136116; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 13 BP; 5 A; 8 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity 92.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABF37365;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 927
   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF0010-ABF9989, ABH0010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                           Set of oligonucleotides, useful for diagnosis and cell typing, addesigned to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9%; Score 11.4; DB 1; Length 13; Best Local Similarity 92.3%; Pred. No. 5.3e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 151677; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 13 BP; 2 A; 0 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                        useful for
                                                                                                                                                                                                                                                                                              χ,
                                                                                                                                                                                                                                                                                              Berlin
                                                                                                 06-APR-2001; 2001WO-IB000713.
                                                                                                                                                              07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                              Piepenbrock C,
                                 18-OCT-2001
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010
                                                                                                                                                                                                                                                                                                                                                 SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Set of oligonucleotides, useful for diagnosis and cell typing, is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                       0
                                                                                                                                                                                                                                                                                                               Oligonucleotide SEQ ID NO 137362 for detecting SNP TSC0034314.
3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 137362; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Berlin K;
                                                                                                                                                                                                     ABF37365 standard; DNA; 13 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       07-APR-2000; 2000DE-01019173
                                                                         921 ATCACCACCACC 933
                                                                                                                                                                                                                                                                           21-FEB-2002 (first entry)
                                                                                              1 AACACCACCACCC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
```

Berlin K;

BP.

ABF84669 standard; DNA; 13

ABF84669

(first entry)

22-FEB-2002

ABF84669;

CATCAACACCACC 13

음

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABF00010-ABF99989 and ABI00010-ABF82073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                         .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide SEQ ID NO 99046 for detecting SNP TSC0024599.
                                                                                                                                                   Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 99046; 29pp + Sequence Listing; German.
                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 13 BP; 5 A; 7 C; 0 G; 1 T; 0 U; 0 Other;
                                                                                                            Sequence 13 BP; 3 A; 7 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                 Score 11.4; DB 1;
Pred. No. 5.3e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berlin K;
                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                   3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                          ABC99029 standard; DNA; 13
                                                                                                                                                                                                                            803 CTCTCCTCCAACT 815
                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                   1 CTCTCCACCAACT 13
                                                                                                                                                                                       Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        methylation status.
                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                  21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-OCT-2001
                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                             ABC99029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          olek A,
                                                                                                                                                                                                                                                                                                                         RESULT
     8X888888
                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                               q
```

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99899, ABF00010-ABF99899 and ABI00010-ABF8073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ver us ossignmucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Oligonucleotide SEQ ID NO 184665 for detecting SNP TSC0045559.
                                                                                                     Oligonucleotide SEQ ID NO 184666 for detecting SNP TSC0045559.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 184666; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 13 BP; 0 A; 5 C; 0 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                             Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                     06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                       07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABF84668 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 rererrerer 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 92.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                           Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                          (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-657177/75.
                                                                                                                                                                                                                                               WO200177384-A2
                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-FEB-2002
                                                                                                                                                                                                                                                                                  18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABF84668;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABF84668/c
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8×4×4×8
```

0

.; 0

Gaps

.. 0

1; Indels

3.9%; Score 11.4; DB 1; 92.3%; Pred. No. 5.3e+02; cive 0; Mismatches 1;

Query Match Best Local Similarity 92.33 Matches 12; Conservative

920 CATCACCACCACC 932

ò

Length 13;

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                         designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                      Set of oligonucleotides, useful for diagnosis and cell typing,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide SEQ ID NO 43252 for detecting SNP TSC0012814.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.4; DB 1; Length 13; 22.3%; Pred. No. 5.3e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 184665; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 13 BP; 8 A; 0 C; 5 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                     Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABC43235 standard; DNA; 13 BP.
                                                                                                                                                                                   06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                    07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 832 TCTTTTCTTCTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13 reterreter 1
                                                                                                                                                                                                                                                                                     Piepenbrock C,
                                                                                                                                                                                                                                                    (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                    WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                         methylation status
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200177384-A2
                                                                                                                  WO200177384-A2
                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-FEB-2002
                                                                                                                                                 18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABC43235;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                     Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
```

ö

```
acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonuclectides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 -ABC99989, ABF00010 -ABE9989, ABF00010 -ABE9989 and ABI00010 -ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                       bet or oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oligonucleotide SEQ ID NO 156229 for detecting SNP TSC0039409.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 156229; 29pp + Sequence Listing; German
                                                                                                                                                                                                      Claim 1; SEQ ID NO 43252; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13 BP; 2 A; 8 C; 0 G; 3 T; 0 U; 0 Other;
                                                                  Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABF56232 standard; DNA; 13 BP.
07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           922 TCACCACCACCT 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 92.3
Les 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Olek A, Piepenbrock C,
                                                                  Olek A, Piepenbrock C,
                                (EPIG-) EPIGENOMICS
                                                                                                     WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EPIG-) EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABF56232;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABF56232/
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
```

ö

12 11:21:14 2004

Mon Jul

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99999, ABF00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire printed specification, but fire wipo.int/pub/published_pct_sequences

Sequence 13 BP; 6 A; 0 C; 4 G; 3 T; 0 U; 0 Other;

Gaps ., 3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; ive 0; Mismatches 1; Indels 888 CACTTACTTCTCA 900 Conservative CACTIACTICTIA 1 Sest Local Similarity 12; 13 Query Match Matches à g

0;

933

ABF65634 standard; DNA; 13 (first entry) 22-FEB-2002 ABF65634; 

BP.

Oligonucleotide SEQ ID NO 165631 for detecting SNP TSC0041532.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Ношо

WO200177384-A2.

18-OCT-2001,

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173.

(EPIG-) EPIGENOMICS AG

Berlin K; Piepenbrock C, olek A,

WPI; 2001-657177/75.

Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.

Claim 1; SEQ ID NO 165631; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABF00010-ABE99989, ABF00010-ABE99989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at

```
ö
                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ligonuclectides, useful for diagnosis and cell typing, it detect single-nuclectide polymorphisms and cytosine
                                                      .,
                                                                                                                                                                                                                      Oligonucleotide SEQ ID NO 137366 for detecting SNP TSC0034314.
                                Length 13;
                                                     Indels
         BP; 5 A; 1 C; 2 G; 5 T; 0 U; 0 Other;
                             Query Match 3.9%; Score 11.4; DB 1;
Best Local Similarity 92.3%; Pred. No. 5.3e+02;
Matches 12; Conservative 0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                      Berlin K;
                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                       06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                            07-APR-2000; 2000DE-01019173.
                                                                                                                                                      ABF37369 standard; DNA; 13
                                                                            941 AATTTTACGCAAG 953
                                                                                                                                                                                                 (first entry)
                                                                                               1 AATTTACGTAAG 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Set of oligonucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                                      Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              designed to detect methylation status.
                                                                                                                                                                                                                                                                                                            WO200177384-A2.
          Sequence 13
                                                                                                                                                                                                 21-FEB-2002
                                                                                                                                                                                                                                                                                                                                  18-0CT-2001
                                                                                                                                                                            ABF37369;
                                                                                                                                 RESULT 934
                                                                                                                                                                                                                                                                                         Ношо
                                                                                                                                           ABF37369
XX
SO
                                                                             à
                                                                                               Db
```

0 This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABR00010-ABH9989, and ABI00010-ABS0010 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at Gaps . 0 ch 3.9%; Score 11.4; DB 1; Length 13; 1 Similarity 92.3%; Pred. No. 5.3e+02; 12; Conservative 0; Mismatches 1; Indels Sequence 13 BP; 2 A; 7 C; 1 G; 3 T; 0 U; 0 Other; 803 CTCTCCTCCAACT 815 Crcrcccccaacr 13 Query Match Best Local Similarity Matches δ

Claim 1; SEQ ID NO 137366; 29pp + Sequence Listing; German.

RESULT 935

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99899, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                      oligonucleotides, useful for diagnosis and cell typing, ied to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 114528 for detecting SNP TSC0028668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
3.9%; Score 11.4; DB 1; Length 13;
Best Local Similarity 92.3%; Pred. No. 5.3e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 257784; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13 BP; 2 A; 4 C; 0 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                            Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABF14531 standard; DNA; 13 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-APR-2000; 2000DE-01019173
                                                                                                                                       06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                     07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            891 TTACTTCTCAGCT 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                            Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTACTTCTCT
                                                                                                                                                                                                                              (EPIG-) EPIGENOMICS
                                                                                                                                                                                                                                                                                                                        WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                              designed to detect methylation status.
                                           WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200177384-A2
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18-OCT-2001.
                                                                                         18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABF14531;
                                                                                                                                                                                                                                                                                                                                                                        Set of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 937
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Set of oligonucleotides, useful for diagnosis and cell typing, :
designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide SEQ ID NO 257784 for detecting SNP TSC0006698.
                                                                                                                                                               Oligonucleotide SEQ ID NO 151678 for detecting SNP TSC0038319.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 151678; 29pp + Sequence Listing; German
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 13 BP; 4 A; 7 C; 0 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABH57807 standard; DNA; 13 BP.
                        ABF51681 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                            06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 921 ATCACCACCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Arcaccacraccc 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 92.3
es 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              methylation status.
                                                                                                                                                                                                                                                                                                                                                  WO200177384-A2.
                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22-FEB-2002
                                                                                                                 21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                              18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABH57807;
                                                                      ABF51681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      olek A,
```

0

Gaps 0;

Berlin K;

Olek A, Piepenbrock C,

(EPIG-) EPIGENOMICS

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

RESULT 936

Matches

ò

0;

Gaps

; 0

Indels

```
Sequence 13 BP; 4 A; 8 C; 0 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                        Berlin K;
                                                                                                                                   ;
0
                                                                                                                                                                                BP.
                                                                                                                        3.9%;
                                                                                                                                                                                                                                                                           06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                    07-APR-2000; 2000DE-01019173
                                                                                                                                                                               ABF40790 standard; DNA; 13
                                                                                                                                             CCACCACCTCCA 937
                                                                                                                                                                                                    (first entry)
                                                                                                                                                      1 ccaccaccrcaa 13
                                                                                                                                   12; Conservative
                                                                                                                                                                                                                                                                                                        Piepenbrock C,
                                                                                                                                                                                                                                                                                              (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                  WPI; 2001-657177/75.
                          methylation status.
    WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                       methylation status.
                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                      WO200177384-A2
                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                   21-FEB-2002
                                                                                                                                                                                                                                                                18-OCT-2001.
                                                                                                                                                                                          ABF40790;
                                                                                                                                             925
                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                        olek A,
                                                                                                                                                                      RESULT 938
                                                                                                                                                                            ABF40790/c
                                                                                                                                  Matches
ò
                                                                                                                                                     g
```

```
range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99989, ABC0010.ABE9989, ABH00010.ABH99989 and ABI00010.ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WFPO at fite.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide SEQ ID NO 147144 for detecting SNP TSC0037153.
                                                                                                                                                                                                                                                                                              3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 147144; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                          Sequence 13 BP; 1 A; 0 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 13 BP; 5 A; 3 C; 1 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                      Pred. No. 5.36
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                         92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABF47147 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                     924 ACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                      Local Similarity 92.3 tes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    13 Accaddacacrdd 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Piepenbrock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-OCT-2001,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABF47147;
                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 939
                                                                                                                                                                                                                                                                                                                                               Matches
          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                    d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                  This invention describes novel oligonuclectide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated ganomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF00010-ABH9989, and ABI00010-ABF9989, ABF00010-ABH9989 and ABI00010-ABIS2073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                 Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Set of oligonuclectides, useful for diagnosis and cell typing, is designed to detect single-nuclectide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 140787 for detecting SNP TSC0035274.
                                                                                                                                                                                   Claim 1; SEQ ID NO 114528; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 140787; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 11.4; DB 1;
Pred. No. 5.3e+02;
0; Mismatches 1;
```

```
18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABF65635;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                         olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABF65635/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT
q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .;
0
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nuclectide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABE9989, ABH00010-ABH99989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at fire.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell typing, :designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ..
0
ö
                                                                                                                                                                                                                                                                                                                   Oligonucleotide SEQ ID NO 150803 for detecting SNP TSC0038060.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 11.4; DB 1; Length 13;
Pred. No. 5.3e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 150803; 29pp + Sequence Listing; German.
Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13 BP; 0 A; 0 C; 9 G; 4 T; 0 U; 0 Other;
Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Berlin K;
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABF50807 standard; DNA; 13 BP.
                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%;
                                                                                                                                                                                        ABF50806 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       921 ATCACCACCACCC 933
                                         954
                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCACCACCACCC 1
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Olek A, Piepenbrock C,
                                         942 ATTTTACGCAAGA
                                                                                 1 ATTTTACGCAACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200177384-A2.
                                                                                                                                                                                                                                                                            21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-OCT-2001
12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABF50807
                                                                                                                                                                                                                                  ABF50806;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 941
  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABF50807
ID ABF5
XX
AC ABF5
XX
                                                                                                                                              ABESULT 94, ABESULT 94, ABESURE ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO806/ABESO80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
```

```
ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE09989, ABF0010-ABE9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                     peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                  SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          set ot oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                         Oligonucleotide SEQ ID NO 150804 for detecting SNP TSC0038060
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide SEQ ID NO 165632 for detecting SNP TSC0041532.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; SEQ ID NO 150804; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 13 BP; 4 A; 9 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABF65635 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     921 ATCACCACCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
21-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ACCACCACCACCC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                       WO200177384-A2
                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                18-OCT-2001
```

```
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13 BP; 5 A; 2 C; 1 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABH25421 standard; DNA; 13 BP.
                       06-APR-2001; 2001WO-IB000713
                                                                                07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    941 AATTTTACGCAAG 953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATTTTACGTAAG 1
                                                                                                                                                                                                 Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Piepenbrock C,
                                                                                                                                        (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                      WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                       methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABH25421;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                 Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABH25421
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HANDER STANDER STANDER
```

```
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99899, ABC0010-ABC99899 and ABI00010-ABC0010 ABC0010 ABC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE039989, ABE00010-ABE99989 and ABI00010-ABE3073 represent the oligomers described in the invention. NOTE: The sequence
                                                                                                                                         invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide SEQ ID NO 99045 for detecting SNP TSC0024599.
                                                                Claim 1; SEQ ID NO 225398; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 99045; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 13 BP; 4 A; 6 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.4; DB 1;
Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABC99028 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        979 TGGTGTATGGGTA 991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13 regreraregaa 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-657177/75.
   methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABC99028;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABC99028/t
ID ABC95
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010 ABC09989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABH82073 tepsesent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                         Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotide SEQ ID NO 225398 for detecting SNP TSC0054945.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 11.4; DB 1; Length 13; Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 1; SEQ ID NO 165632; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                          Berlin K;
```

ö

Gaps

.,

Length 13;

```
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC9989, ABF0010-ABF9989, ABH0010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
                                                                                                                                                                                                                                                                                                                        SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Set of oligonucleotides, useful for diagnosis and cell typing, is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                      .
0
                                                                                                                                                                                                                                                                                                 Oligonucleotide SEQ ID NO 63569 for detecting SNP TSC0016788.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 13; 12.3%; Pred. No. 5.3e+02; ve 0; Mismatches 1; Indels
                                                                          Score 11.4; DB 1; Length 13;
Pred. No. 5.3e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; SEQ ID NO 63569; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 13 BP; 3 A; 0 C; 5 G; 5 T; 0 U; 0 Other;
                                                   Sequence 13 BP; 1 A; 0 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ftp.wipo.int/pub/published_pct_sequences
                        ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Berlin K;
                                                                                                                                                                                                                    ABC63552 standard; DNA; 13 BP
                                                                      Query Match 3.9%;
Best Local'Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          92.3%;
                                                                                                                             920 CATCACCACC 932
                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                              13 CATCAACACCACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ນ ່
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (EPIG-) EPIGENOMICS AG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Piepenbrock
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 12; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                     WO200177384-A2.
                                                                                                                                                                                                                                                                        21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                              18-OCT-2001.
                                                                                                                                                                                                                                               ABC63552;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Olek A,
                                                                                                                                                                                             RESULT 945
                                                                                                                                                                                                        88888
                                                                                                                                                    g
```

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF99989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oligonucleotide SEQ ID NO 156230 for detecting SNP TSC0039409.
                                                                                                                                                                         Oligonucleotide SEQ ID NO 114527 for detecting SNP TSC0028668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; trive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 114527; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13 BP; 1 A; 0 C; 8 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Etp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Berlin K;
BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABF56233 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity 92.3%;
es 12; Conservative
ABF14530 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   925 CCACCACCTCCA 937
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCACCACCCTCAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŊĠ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPIG-) EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                 WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21-FEB-2002
                                                                                                               21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABF56233;
                                                       ABF14530;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABF56233
```

ö

0

Gaps

. 0

915 ATTATCATCACCA 927

ð

13 ATCATCATCACCA 1

12; Conservative

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF9989, ABH00010-ABH99989 and ABI00010-ABI82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but
peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                        Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide SEQ ID NO 245887 for detecting SNP TSC0060075.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 13;
                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; SEQ ID NO 156230; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.4; DB 1; 92.3%; Pred. No. 5.3e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                         Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABH45910 standard; DNA; 13 BP.
                                                                                                                                                      06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                       07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   888 CACTTACTTCTCA 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 CACTTACTTCTTA 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12; Conservative
                                                                                                                                                                                                                                                       Piepenbrock C,
                                                                                                                                                                                                                       (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                         WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                            methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO200177384-A2.
                                                                                    WO200177384-A2.
                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                      18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABH45910;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                       olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 94
ABH45910/
   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

0;

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE99989, ABF00010-ABE99989, ABH00010-ABE99989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic formmat from WIPO at ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    central nervous system; gastrointestinal; respiratory; immune; metabolic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                       Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonucleotides, useful for diagnosis and cell typing, i designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide SEQ ID NO 140788 for detecting SNP TSC0035274.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02;
                                                                                                                                                                                  Claim 1; SEQ ID NO 245887; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; SEQ ID NO 140788; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 13 BP; 10 A; 0 C; 3 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                    Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABF40791 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouery Match
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          13 rcrrrrcrrrcr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Olek A, Piepenbrock C,
                                  Piepenbrock C,
(EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (EPIG-) EPIGENOMICS AG
                                                                      WPI; 2001-657177/75.
                                                                                                                                               methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-OCT-2001.
                                  Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABF40791
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

ö

Gaps

; 0

1; Indels

Length 13;

```
acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory. Central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABH99999 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this parent did not form part of the printed specification, but the wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Set of oligonuclectides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                       Oligonucleotide SEQ ID NO 168100 for detecting SNP TSC0042044.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; SEQ ID NO 168100; 29pp + Sequence Listing; German.
                                                                                                                                                                     Sequence 13 BP; 4 A; 8 C; 0 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                 Score 11.4; DB 1;
Pred. No. 5.3e+02;
                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Berlin K;
                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                  3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                      ABF68103 standard; DNA; 13
                                                                                                                                                                                                                                                        924 ACCACCACCTCC 936
                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                        1 ACCACCACACTCC 13
                                                                                                                                                                                                                              12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             methylation status.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200177384-A2
                                                                                                                                                                                                                                                                                                                                                                                                             22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-OCT-2001.
                                                                                                                                                                                                                                                                                                                                                                                  ABF68103;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Olek A,
                                                                                                                                                                                                                                                                                                                      Matches
     8x88888888888x8
                                                                                                                                                                                                                                                        à
                                                                                                                                                                                                                                                                               ΩD
```

Sequence 13 BP; 5 A; 4 C; 0 G; 4 T; 0 U; 0 Other;

```
.
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC09989, ABR0010-ABP9989 and ABI00010-ABR3073 represent the oligomers described in the invention. NOTE: The sequence data for this patent din ot form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes novel oligonucleotide primers or peptide nucleic
                                                                                                                                                                                                                                                                                                                       SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine methylation status.
                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ö
                                                                                                                                                                                                                                                                                         Oligonucleotide SEQ ID NO 54409 for detecting SNP TSC0014925.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02;
 Length 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 1; SEQ ID NO 54409; 29pp + Sequence Listing; German.
                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 13 BP; 3 A; 1 C; 6 G; 3 T; 0 U; 0 Other;
Score 11.4; DB 1;
Pred. No. 5.3e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Berlin K;
                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
   3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92.3%;
                                                                                                                                                                                        ABC54392 standard; DNA; 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABH13777 standard; DNA; 13
                                                                     967 ACTCTCTAAATCT 979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   735 TAGGACTIGGIAG 747
                                                                                                                                                                                                                                                         (first entry)
                                                                                                    1 ACTCTCTAAAACT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 raccaccrecrac 13
                   Best_Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Olek A, Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ÅĠ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (EPIG-) EPIGENOMICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-657177/75
                                                                                                                                                                                                                                                                                                                                                                                                                            WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                         21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-OCT-2001.
   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 952
                                                                                                                                                      RESULT 951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABH13777
ID ABH1
                                                                                                                                                                        ABC54392
                                                                                                                                                                                                        ð
                                                                      충
                                                                                                                                                                                                                                                           ö
```

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABC99999, ABF00010-ABF99999, ABF00010-ABF99999, abmootle-ABE99999 and ABI00010-ABF90010 in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but the was obtained in electronic format from WIPO at
                                                                                                                          SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SNP; single nucleotide polymorphism; hyman; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylatíon; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                       Oligonucleotide SEQ ID NO 213754 for detecting SNP TSC0052036.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oligonucleotide SEQ ID NO 136115 for detecting SNP TSC0033992.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; SEQ ID NO 213754; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 13 BP; 3 A; 4 C; 0 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                       Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABF36118 standard; DNA; 13 BP.
                                                                                                                                                                                                                                                                                                            06-APR-2001; 2001WO-IB000713.
                                                                                                                                                                                                                                                                                                                                                07-APR-2000; 2000DE-01019173,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         967 ACTCTCTAAATCT 979
                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-FEB-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 ACTOTOTTANTOT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best_Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                     Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                  (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    methylation status.
                                                                                                                                                                                                                                     WO200177384-A2
                                                                                                                                                                                                   Homo sapiens
                                                     22-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
                                                                                                                                                                                                                                                                         18-OCT-2001
                 ABH13777;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABF36118;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                     Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABF36118,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
```

```
This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The bligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC00010-ABC9989, ABF00010-ABF9989, ABH00010-ABH9989 and ABI00010-ABI82073 tepresent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.
                                                                                                                                                                                                                            Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oligonucleotide SEQ ID NO 137365 for detecting SNP TSC0034314.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                           Claim 1; SEQ ID NO 136115; 29pp + Sequence Listing; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 13 BP; 0 A; 0 C; 8 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                              Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Berlin K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABF37368 standard; DNA; 13 BP.
                                                                06-APR-2001; 2001WO-IB000713.
                                                                                                 07-APR-2000; 2000DE-01019173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-APR-2001; 2001WO-IB000713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      07-APR-2000; 2000DE-01019173.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            921 ATCACCACCC 933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 92.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13 AACACCACCACCC 1
                                                                                                                                                              Piepenbrock C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Olek A, Piepenbrock C,
                                                                                                                                 (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (EPIG-) EPIGENOMICS AG
                                                                                                                                                                                               WPI; 2001-657177/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-657177/75.
                                                                                                                                                                                                                                                              methylation status.
WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200177384-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-FEB-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-OCT-2001.
                                18-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABF37368;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                              Olek A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABF37368/
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
```

0

Gaps

```
Set of oligonucleotides, useful for diagnosis and cell typing, is designed to detect single-nucleotide polymorphisms and cytosine
                                                                                                                                                                                                          Claim 1; SEQ ID NO 137365; 29pp + Sequence Listing; German
                                                                                                             methylation status
```

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, coligomers are also used for detecting cell type differentiation. ABC00010-ABC99989, ABF00010-ABF99899, ABH00010-ABH99989 and ABI00010-ABH82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at Gaps 0 3.9%; Score 11.4; DB 1; Length 13; 92.3%; Pred. No. 5.3e+02; cive 0; Mismatches 1; Indels Sequence 13 BP; 3 A; 1 C; 7 G; 2 T; 0 U; 0 Other; was obtained in electronic format from W. ftp.wipo.int/pub/published_pct_sequences Local Similarity 92.3 nes 12; Conservative Query Match Matches

803 CTCTCCTCCAACT 815 CTCTCCGCCAACT 1 13 à

ö

ABF68102 standard; DNA; 13 (first entry) 22-FEB-2002 ABF68102, RESULT 955 ABF68102, 

Oligonucleotide SEQ ID NO 168099 for detecting SNP TSC0042044.

BP.

SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; central nervous system; gastrointestinal; respiratory; immune; metabolic.

Homo sapiens

WO200177384-A2.

18-OCT-2001.

06-APR-2001; 2001WO-IB000713.

07-APR-2000; 2000DE-01019173

(EPIG-) EPIGENOMICS AG.

Berlin K; Piepenbrock C, olek A,

WPI; 2001-657177/75

Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status. Claim 1; SEQ ID NO 168099; 29pp + Sequence Listing; German.

This invention describes novel oligonucleotide primers or peptide nucleic acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and oytosine methylation status in chemically pretreated genomic DNA. The oligonucleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The

ö ò acid (PNA) oligomers for detecting single nucleotide polymorphisms (SNP) and cytosine methylation status in chemically pretreated genomic DNA. The oligomers lost status in chemically pretreated genomic DNA. The oligomerleotides are used for diagnosis and/or prognosis of cancer and a range of diseases including immune system, gastrointestinal, respiratory, central nervous system, cardiovascular and metabolic disorders. The oligomers are also used for detecting cell type differentiation. ABC0010-ABE039989, ABF00010-ABE9989, ABH0010-ABE9989 and ABI00010-ABE82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but twipo.int/pub/published_pct_sequences oligomers are also used for detecting cell type differentiation. ABC00010 -ABC9989, ABF0010-ABF99889, ABH0010-ABH9989 and ABI00010-ABF82073 represent the oligomers described in the invention. NOTE: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format from WIPO at ftp.wipo.int/pub/published_pct_sequences This invention describes novel oligonucleotide primers or peptide nucleic central nervous system; gastrointestinal; respiratory; immune; metabolic. SNP; single nucleotide polymorphism; human; diagnosis; PNA; cancer; CNS; peptide nucleic acid; cytosine methylation; cardiovascular; primer; ss; Gaps Gaps Set of oligonucleotides, useful for diagnosis and cell typing, idesigned to detect single-nucleotide polymorphisms and cytosine methylation status. ·. ; Oligonucleotide SEQ ID NO 137361 for detecting SNP TSC0034314. Query Match 3.9%; Score 11.4; DB 1; Length 13; Best Local Similarity 92.3%; Pred. No. 5.3e+02; Matches 12; Conservative 0; Mismatches 1; Indels Query Match 3.9%; Score 11.4; DB 1; Length 13; Best Local Similarity 92.3%; Pred. No. 5.3e+02; Matches 12; Conservative 0; Mismatches 1; Indels Claim 1; SEQ ID NO 137361; 29pp + Sequence Listing; German Sequence 13 BP; 4 A; 0 C; 4 G; 5 T; 0 U; 0 Other; Sequence 13 BP; 3 A; 0 C; 7 G; 3 T; 0 U; 0 Other; Berlin K; BP. 06-APR-2001; 2001WO-IB000713 07-APR-2000; 2000DE-01019173 ABF37364 standard; DNA; 13 967 ACTCTCTAAATCT 979 21-FEB-2002 (first entry) Olek A, Piepenbrock C, ACTCTCTAAAACT (EPIG-) EPIGENOMICS WPI; 2001-657177/75 WO200177384-A2. Homo sapiens. 18-OCT-2001 13 ABF37364; RESULT 956 ABF37364/c 8888888888 ð

```
20-JUN-1996
                                                                                                                               07-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAV39510;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV39510
 ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AXXXXXXXXXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Arthritic condition, graft tolerance, immune response, target, cleavage, hammerhead ribozyme, hairpin ribozyme, human, rabbit, mouse, collagenase, stromelysin, synovial membrane, joint, arthritis, osteoarthritis, rheumatoid arthritis, autoimmune disease, allergy, inflammation,
                                                                                                                                                                                                                                                                                  Nucleic acid sequence single primer amplification - useful for genomic variation analysis and polymorphism detection for restriction fragment length data.
                                                                                                                                                                                                                                                                                                                                           PN
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                            The selected primer is used in practice of the single primer amplification reaction (SPAR). (Updated on 25-MAR-2003 to correct field.)
                                                                                                                                                                                                                                                                                                                                                                                                   .,
                                                                                                                                                                                                                                                                                                                                                                                Score 11.4; DB 1; Length 15;
Pred. No. 6.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human B7-2 hammerhead ribozyme target SEQ ID NO:2337.
                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 5 A; 10 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                              Single primer amplification; SPAR; ss.
                                                                                                                                                                                                                                                                                                                   Claim 16; Page 39; 65pp; English.
                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX65705 standard; RNA; 15 BP.
                                                                                                                                                                                             91WO-US008233.
                                                                                                                                                                                                            90US-00610973.
                                                                                                                                                                                                                                                                                                                                                                                 3.98;
                                                                                                                                                                                                                                                                                                                                                                                         92.3%;
                                                       AAQ24934 standard; DNA; 15
CICICCICCAACI 815
                                                                                       (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                 920 CATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                              CACCACCACCACC 13
                н
                                                                                                                                                                                                                                                                                                                                                                                         3est_Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                    Filner P;
                Crcrccaccaacr
                                                                                                              Synthetic primer (261).
                                                                                                                                                                                                                                    (LUBR ) LUBRIZOL CORP.
                                                                                                                                                                                                                                                                    WPI; 1992-183683/22.
                                                                                                                                                                                                                                                    Cardineau GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      diagnosis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-JUL-1999
                                                                                                                                                             WO9207948-A1
                                                                                                                                                                                            05-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                            06-NOV-1990;
                                                                                                                                                                                                                      29-JUL-1991;
                                                                                       25-MAR-2003
19-NOV-1992
                                                                                                                                                                             14-MAY-1992
                                                                                                                                              Synthetic.
                                                                       AAQ24934;
803
               13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX65705;
                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                        RESULT 957
                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 958
                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX65705
                                                 AAQ2493.
                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        à
               d
```

```
The present invention describes a novel enzymatic nucleic acid (ENA)
having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues
(ii) a 2'-C-allyl modification at position 4 of the ENA; (iii) at least
ten 2'-O-methyl modifications; and fiv) a 3'-end modification. The ENA's
can inhibit collagenase and stromelysin production in the synovial
membrane of joints for the treatment or prevention of arthritis,
particularly osteoarthritis or rheumatoly of a donor to induce tolerance
to be used to treat antigen presenting cells of a donor to induce tolerance
in a recipient to an alloantigen of a donor. They can also be used for
chhancing graft tolerance or for treating autoimmune disease, and for
treating allergies and other inflammatory conditions. The ENA's can also
be used in diagnosis. Ribozyme therapy impacts on the expression of
stromelysin without introducing the non-specific effects upon gene
expression which accompany treatment with retinoids and dexamethasone.
The concentration of ribozyme required to affect a therapeutic treatment
is lower than that required of antisense molecules, and is highly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment of
auto-immune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        specific. The present sequence is used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Jarvis T, Draper K, Pavco P;
sman N, Wincott F, Matulic-Adamic J;
odak A, Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4; DB 1; Length 15; 38.5%; Pred. No. 6.4e+02; ive 7; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 0 A; 5 C; 2 G; 0 T; 8 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mass spectrometric analysis primer SEQ ID NO:31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Usman N,
Modak A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 10; Page 188; 307pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV39510 standard; cDNA; 15 BP.
                                                                                                                              95WO-US015516.
                                                                                                                                                                                                                   94US-00363253.
                                                                                                                                                                                                                                                                                95US-00390850,
                                                                                                                                                                                                                                                                                                              95US-00426124.
95US-00432874.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stinchcomb DT,
                                                                                                                                                                                                                                                                                                                                                                                                               95US-0000951P.
                                                                                                                                                                                                                                                                                                                                                                                                                                         95US-0000974P
                                                                                                                                                                                                                                                                                                                                                                           95US-00434509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95US-00512861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95US-00541365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gustofson J,
Thompson JD,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            833 CTTTTCTTCTG 845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |::: |::|:|
cutudecutecucug 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1996-300653/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Beigelman L,
Mcswiggen J,
Karpeisky A,
                                                                                                                                                                                                                                                                                17-FEB-1995;
20-APR-1995;
02-MAY-1995;
WO9618736-A2
                                                                                                                           22-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    28-SEP-1998
                                                                                                                                                                                                                                                      23-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                              04-MAY-1995;
```

```
fragments (F) from the target nucleic acid; and (ii) analysing F by mass spectrometry (MS). The sequences in AAV3403 to AAV3952 are specifically claimed primers for use in the mass spectrometric analysis of the above process. The process is used to detect genetic diseases (e.g. haemophilia, thalassemia, Duchenne muscular dystrophy, Alzheimer's disease, cystic fibrosis and many others) or chromosomal abnormalities (or predisposition); infections and cancers; also for establishing identity and heredity. Particular applications are diagnosis of neuroblastoma, detecting telomerase, determining family relationships and HLA compatibility, and in genetic fingerprinting. Compared with known methods using MS, this process requires fewer specific reagents and is better suited to automation. Extended primers are shorter; primer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequencing nucleic acid by mass spectrometric analysis - for detecting nucleic acids, telomerase activity, oncogene mutations, or cancerspecific sequences, for diagnosis of disease.
Mass spectrometry, diagnosis, detection; biological sample, infection, genetic disease; chromosomal abnormality, identification; heredity, pathogenic organism; telomerase activity; oncogene mutation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A process has been developed for determining the sequence of a target
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       annealing is more efficient and the process allows detection of many
                                                                                                                                                                                                                                                                                                                                                                                             Tang K, Fu D, Siegert CW, Little DP, Higgins GS;
Damhoffer-Demar B, Jurinke C, Van Den Boom D, Xiang G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                    cancer-specific sequence; primer; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 48; Page 249; 478pp; English
                                                                                                                                                                                                              96US-00744481.
96US-00744590.
96US-00746036.
97US-00786988.
97US-00786989.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВР
                                                                                                                                                                                  97WO-US020444
                                                                                                                                                                                                                                                                                                                              97US-00947801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV42654 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         792 GGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTTCCAAGAGCT 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sequences simultaneously
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                (SEQU-) SEQUENOM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-286975/25.
                                                                                                                   WO9820166-A2
                                                                                                                                                                                  06-NOV-1997;
                                                                                                                                                                                                                                                                                                               19-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-2003
16-OCT-1998
                                                                                                                                                 14-MAY-1998.
                                                                                                                                                                                                                06-NOV-1996;
                                                                                                                                                                                                                                                                 9661-AON-90
                                                                                                                                                                                                                                                                               23-JAN-1997;
                                                                                                                                                                                                                                                06-NOV-1996
                                                                                                                                                                                                                                                                                                                                                                                                Koster H,
                                                                                    Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                 Braun A,
Lough DM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV42654;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV42654
ID AAV4
XX
AC AAV4
XX
DT 25-P
DT 16-C
```

ö

Gaps

. 0

```
The present sequence appears in the specification, which describes a hybridisation probe used to differentiate between pathogenic and vaccine strains of cattle brucellosis. The method comprises digestion of DNA from the test strain with restriction enzyme Nco 1, transfer of the fragments obtained to filters, subsequent fixing of these onto the filters, hybridisation with a labelled sample, and examination of the results. (Updated on 25-MAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                                                    Differentiating pathogenic and vaccine strains of cattle brucellosis - using restriction digestion with Nco 1 and transfer of the DNA fragments
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Probe used to identify pathogenic and vaccine strains of brucellosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Hybridisation probe; differentiation; pathogenic; vaccine strain;
                      Hybridisation probe, differentiation, pathogenic, vaccine strain, cattle brucellosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ٥:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4; DB 1; Length 15; Pred. No. 6.4e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seguence 15 BP; 5 A; 10 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Idrisov GZ, Mullakaev OT;
                                                                                                                                                                                                                              Mullakaev OT;
                                                                                                                                                                                                      (KZVE=) KAZAN VETERINARY MED ACAD.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VETERINARY MED ACAD
DNA sequence of the specification.
                                                                                                                                                                                                                                                                                                                to filters in an electric field.
                                                                                                                                                                                                                                                                                                                                           Disclosure; Col 4; 4pp; Russian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94RU-00024845.
                                                                                                                                                 94RU-00024845.
                                                                                                                                                                            94RU-00024845.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94RU-00024845
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV42817 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            920 CATCACCACCACC 932
                                                                                                                                                                                                                               Faizov T Kh, Idrisov GZ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 CACCACCACCACC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cattle brucellosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (revised)
                                                                                                                                                                                                                                                           WPI; 1998-411609/35.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (KZVE=) KAZAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Faizov T Kh,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RU2095418-C1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-JUL-1994;
                                                                                                                                                                            01-JUL-1994;
                                                                                                                                                 01-JUL-1994;
                                                                                             RU2095418-C1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAR-2003
16-OCT-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-NOV-1997.
                                                                                                                        10-NOV-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic.
                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV42817;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV42817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

ö

```
Differentiating pathogenic and vaccine strains of cattle brucellosis - using restriction digestion with Nco 1 and transfer of the DNA fragments to filters in an electric field.
                                                                                                                                                                                                                                                                                                                                                                   present sequence represents a hybridisation probe used to
                                                                                                                                                                                                                                                                     Claim 1; Col 8; 4pp; Russian.
WPI; 1998-411609/35
```

```
differentiate between pathogenic and vaccine strains of cattle brucellosis. The method comprises digestion of DNA from the test strain with restriction enzyme Nco 1, transfer of the fragments obtained to filters, subsequent fixing of these onto the filters, hybridisation with a labelled sample, and examination of the results. (Updated on 25-WAR-2003 to correct PI field.)
                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                     .,
                                                                                                                                                                                                        Length 15;
                                                                                                                                                                                                                                                     1; Indels
                                                                                                                                                           Sequence 15 BP; 5 A; 10 C; 0 G; 0 T; 0 U; 0 Other;
                                                                                                                                                                                                     Score 11.4; DB 1;
Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                        3.9%;
                                                                                                                                                                                                                                                                                               CATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                         13
                                                                                                                                                                                                                           Local Similarity 92.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                  1 CACCACCACCACC
                                                                                                                                                                                                                                                                                             920
                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                             ò
                                                                                                                                                                                                                                                                                                                                         q
```

0;

Substrate for hammerhead ribozyme which cleaves HCV RNA at nt. 964. AAZ63736 standard; RNA; 15 BP. (first entry) 28-MAR-2000 AAZ63736; RESULT 962 AAZ63736 

cleavage; cancer; Enzymatic nucleic acid, hammerhead ribozyme, virus replication, cirrhosis, liver failure, hepatocellular carcinoma; interferon, autoimmune disease; ss.

Hepatitis C virus

WO9955847-A2

04-NOV-1999

99WO-US009027. 98US-0083217P 26-APR-1999; 27-APR-1998;

98US-0100842P. 99US-00274553 18-SEP-1998 25-FEB~1999 23-MAR-1999

(RIBO-) RIBOZYME PHARM INC

Macejak D; Pavco PA, Roberts E, Mcswiggen JA, Blatt L,

WPI; 2000-062023/05

Novel ribozymes for the treatment of diseases and conditions related to hepatitis C infection.

Claim 1; Page 69; 123pp; English.

The present sequence represents the preferred target sequence of an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the Heparitis C virus (HCV) RNA sequence at the base position given in the descriptor line. The HCV sequence was screened for optimal ribozyme target sites using a computer folding algorithm and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised to

```
The present invention describes a method developed for identifying a target nucleic acid sequence (NA) in a biological sample as normal or mutant, by hybridising the NA with a mutant or normal primer capable of hybridising to the mutated or wildfupe sequence in the target NA and identifying the target NA mass spectrometry. The method can be used of confidence of genetic disease, chromosomal abnormality, as predisposition to a genetic disease, cancer or an infection, by identifying a target nucleic acid sequence in a biological sample. The method is also useful for diagnosing a predisposition to a disease or condition (e.g. obesity, atherosclerosis) or to provide information condition (e.g. obesity, atherosclerosis) or to provide information called in the method is highly accurate, reliable and avoids electrophoretic.

The method is highly accurate, reliable and avoids electrophoretic.

The method is less expensive. Nucleic acid fragments are identified and detection steps. The entire method can be completed within 2 abeling and is less expensive. Nucleic acid fragments are identified and elected at the same tile by the specific molecular weights and the method allows rigorous controls for preventing false negative or positive results. The present sequence represents a DNA sequence used in an
                                                                                                                                                                                                                                                                                  .;
0
               length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes of the invention inhibit gene expression and/or viral replication, and are used to treat diseases associated with Hepatitis C virus (HCV) infection, e.g. cirrhosis, liver failure and hepatocellular carcinoma. The ribozymes may be used in combination with interferon to treat HCV infection, other infectious diseases, autoimmune
these sites and their activities optimised by either varying the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Identifying target nucleic acid sequence in a biological sample useful for diagnosis of genetic disease or chromosomal abnormality, involves
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cystic fibrosis; mutation; detection; mass spectrometry; diagnosis; genetic disease; chromosomal abnormality; infection; cancer; obesity; atherosclerosis; ss.
                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1; Length 15; 69.2%; Pred. No. 6.4e+02; ive 3; Mismatches 1; Indels
                                                                                                                                                                                         Sequence 15 BP; 4 A; 6 C; 2 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Little DP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Example 9; Col 47; 95pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-mer oligonucleotide template.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96US-00617256.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95US-00406199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA13593 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                           805 CTCCTCCAACTCA 817
                                                                                                                                                                                                                                                                                                                                                                   cuecuccaacuca 15
                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               H, Higgens GS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          using mass spectrometer.
                                                                                                                                                   diseases, and cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SEQU-) SEQUENOM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2000-270337/23.
                                                                                                                                                                                                                                                        Local Similarity
les 9; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US6043031-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-MAR-2000.
                                                                                                                                                                                                                                                                                                                                                                   m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAA13593;
                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Koester
                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 963
                                                                                                                                                                                                                                                                              Matches
8866666668888
                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                 원
```

Matches

à Dp

S X C C

```
The present invention provides the protein and coding sequences of several polymorphic variants of the human immunoglobulin E receptor beta formin (IGRRB). These contain single nucleotide polymorphisms (SNPs) which may be indicative of a predisposition to atopy, allergy, asthma, rhinitis and eczema. Also provided are the sequences of probes and primers for use in identifying the gencype of an individual with regards to the IGRBB gene. The IGRBB gene is found at human chromosome 11q13. The sequences are all useful in therapeutics. The present sequence was used to isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; immunoglobulin E receptor beta chain; IGERB; chromosome 11q13;
allergy; asthma; rhinitis; eczema; single nucleotide polymorphism; SNP;
atopy; probe; PCR primer; ss.
                                                                                    Human; immunoglobulin E receptor beta chain; IGERB; chromosome 11q13;
allergy; asthma; rhinitis; eczema; single nucleotide polymorphism; SNP;
atopy; probe; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel polynucleotide useful for therapeutic purposes, comprises nucleotide polymorphisms in immunoglobulin E receptor beta chain gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 11.4; DB 1; Length 15; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 3 A; 10 C; 0 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human IGERB allele specific probe SEQ ID NO: 7.
                                             Human IGERB allele specific probe SEQ ID NO: 6.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 15; Page 60; 88pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                       (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-AUG-2000; 2000WO-US022175.
                                                                                                                                                                                                                                                                                                                              11-AUG-2000; 2000WO-US022175.
                                                                                                                                                                                                                                                                                                                                                                         99US-0150423P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAF92149 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          919 TCATCACCACCAC 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15-MAY-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCATCCCCACCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kliem SE,
                                                                                                                                                                                                                                                                                                                                                                                                                                               (NAND/) NANDABALAN K
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2001-226623/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                  WO200114588-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200114588-A1
                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                            24-AUG-1999;
15-MAY-2001
                                                                                                                                                                                                                                                                                01-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Denton RR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·:
0
                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of
for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Detecting a chromosome 1q21-q24 abnormality for diagnosing metabolic disease, such as human obesity and diabetic disorders, comprises examining insulin receptor-related receptor gene and its gene products.
  example from the present invention for solid state sequencing and mass
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention relates to insulin receptor-related receptor (TRRR) ("IRRR). Mutations in this gene indicate a chromosome 1q21-q234 abnormality. IRRR polypeptides and DNA may be useful in the diagnosis of disorders associated with abnormal expression of the IRRR protein,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Insulin receptor-related receptor; IRRR; chromosome 1q21-q24; obesity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                      Length 15;
                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 7 A; 0 C; 5 G; 3 T; 0 U; 0 Other;
                                                                        Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                   Score 11.4; DB 1;
Pred. No. 6.4e+02;
                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 example obesity, dyslipidemia and diabetes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 10; Page 43; 111pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human IRRR oligonucleotide #29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF92148 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                      3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-APR-2000; 2000WO-US010644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-00296906
99US-00337976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    916 TTATCATCACCAC 928
                                                                                                                                                                                                                                                                                                                                                                                 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      dyslipidemia; diabetes; ss
                                                                                                                                                                                                                 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 92.3
nes 12; Conservative
                                                                                                                                                                    12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (ZYMO ) ZYMOGENETICS INC
                                                                                                                                                                                                                                                                                                                                                                              AAC68373 standard; DNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTATCATCACCTC
                                                                                                                                                                                                                                              GGTTCCAAGAGCT
                                                                                                                                                                                                               792 GGTGCCAAGAGCT
                            spectrometer detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Whitmore TE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2000-687365/67.
                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200065090-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-APR-1999;
22-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                02-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF92148,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                            AAC68373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lok S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 965
AAF92148
ID AAF921.
XX
AC AAF921.
                                                                                                                                                                                                                                                                                                                              RESULT 964
AAC68373/C
ADC68373/C
```

6 g

0;

Gaps · 0

Indels

24-AUG-1999;

. 0

Gaps

·,

```
The sequence represents an allele specific oligonucleotide probe for genotyping individuals using the Human gene encoding the ml muscarinic
                                                                                      Claim 15; Page 60; 88pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 15; Page 19; 52pp; English
              (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                           AAS02969 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                         (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                             12-OCT-2000; 2000WO-US028211;
                                                                                                                                                                                                                        919 TCATCACCACCAC 931
                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                      TCATCTCCACCAC 15
                                                                                                                                                                                                  Local Similarity 92.3
tes 12; Conservative
                                   Kliem SE,
                     (NAND/) NANDABALAN K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Denton RR,
                                                  WPI; 2001-226623/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2001-282046/29.
                                                                                                                                              gene. The IGERB
are all useful i
the IGERB gene
                                                                                                                                                                                                                                                                                                                                                                                WO200127312-A2
                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                           13-OCT-1999;
                                                                                                                                                                                                                                                                                                        29-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                               19-APR-2001.
                                   Denton RR,
                                                                                                                                                                                                                                                                                         AAS02969;
                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Choi JY,
                                                                                                                                                                                                                                                             RESULT 967
                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                    AAS02969
ò
                                                                                                                                                                                                                                      Q
```

```
genetically distinct my carrier acceptabiline receptors, machine play important roles in higher brain function such as learning and memory. The protein is a possible drug target for treatments for Alzheimer's disease and dementia with Lewy bodies (DLB). The gene, polypeptide, haplotypes and antibodies raised against the protein are useful for diagnosing and expression of the gene or activity of the protein, e.g. Alzheimer's disease and dementia with Lewy bodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to identifying the presence or absence of a mutation in a target nucleic acid sequence. The method involves hybridizing the target sequence with an oligonucleotide probe complementary to a region of the target sequence that can contain a mutation. The resulting heteroduplex is treated with a single strand specific endonuclease and mass spectometry is used to detect the product. The method allows for rigorous controls to prevent false negative or subsequent detection of a label. The present sequence is a 15-mer template captured by a probe duplex.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Identifying mutation in nucleic acid sequence for diagnosing genetic disease, involves hybridizing target sequence with complementary probe and contacting the heteroduplex with single strand specific endonuclease.
    acetylcholine receptor, CHMR1. CHMR1 is one subtype of a family of 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                           Length 15;
                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mutation detection; endonuclease; heteroduplex; ss.
                                                                                                                                                                                                                          Sequence 15 BP; 1 A; 6 C; 5 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                       Score 11.4; DB 1;
Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15-mer template captured by duplex probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 9; Col 41; 91pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                       3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00287141.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           95US-00406199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96US-00617256.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAF85931 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                               851 AGCGTCCTGGCTC 863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                       Query Match 3.99
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                       1 AGCGCCCTGGCTC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SEQU-) SEQUENOM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-256361/26.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US6197498-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-MAR-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Koester
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 968
      88888888888888
                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                    엄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                     The present invention provides the protein and coding sequences of several polymorphic variants of the human immunoglobulin E receptor beta chain (IGERB). These contain single nucleotide polymorphisms (SNPs) which may be indicative of a predisposition to atopy, allergy, asthma, rhinitis and eczema. Also provided are the sequences of probes and primers for use in identifying the genotype of an individual with regards to the IGERB gene. The IGERB gene is found at human chromosome 11q13. The sequences are all useful in therapeutics. The present sequence was used to isolate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              useful to
                                                                                                                                                                                              Novel polynucleotide useful for therapeutic purposes, comprises nucleotide polymorphisms in immunoglobulin E receptor beta chain gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New variants of the ml muscarinic acetylcholine receptor gene, usefi
find treatment for Alzheimer's and dementia, have single nucleotide
variations at one or more of five polymorphic sites.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; ml acetylcholine receptor; CHRM1; immunogen; antibody;
Alzheimer's disease; dementia with Lewy bodies; DLB;
allele specific oligonucleotide probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 11.4; DB 1; Length 15; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human CHMR1 allele specific oligonucleotide probe #29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 15 BP; 3 A; 9 C; 0 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nandabalan K,
                                                                                                             Stephens JC;
99US-0150423P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0159269P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92.3%;
```

·.

Gaps

. 0

RESULT 970

```
The present invention describes a method for detecting the presence of a target nucleic acid sequence in a biological sample comprises hybridising a detector oligonucleotide the target nucleic acid sequence, removing the hybridised detector oligonucleotide, and detecting the hybridised detector oligonucleotide, and detecting the hybridised diagnose (pre- or post-natally) a genetic disease or chromosomal abnormality, a predisposition to a disease or condition (e.g. obesity, atheredity a predisposition to a disease or condition (e.g. obesity, atheredity or compatibility, to detect a particular nucleic acid sequence in a biological sample. The method provides increased accuracy and reliability of nucleic acid detection by mass spectrometry, allow for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Detecting a target nucleic acid sequence in a sample, useful for e.g. diagnosing a genetic or chromosomal abnormality, comprises detecting the detector oligonucleotide hybridized to the target nucleic acid by mass
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rigorous controls to prevent false negative or false positive results, avoid electrophoretic steps, and mass spectrometric analysis requires only about 2-3 hours. The method is faster and less expensive to perform
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   than existing DNA detection systems, and also much more accurate and reliable. The present sequence represents a nucleotide sequence which is used in an example from the present invention
                                                                                                                                                                                                                                                                               Chromosomal abnormality, detection, mass spectrometry, diagnosis; genetic disease; infection; obesity; atherosclerosis; cancer; pathogenic microorganism; DNA detection system; ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 9; Col 44; 92pp; English.
                                                                                                                                                                                                                                             15-mer template oligonucleotide.
                                                                                                                                 AAH41398 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96US-00617256.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99US-00287682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95US-00406199
                                                                                                                                                                                                          (first entry)
                                     GGTTCCAAGAGCT 15
792 GGTGCCAAGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (SEQU-) SEQUENOM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-366403/38.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                               US6235478-B1.
                                                                                                                                                                                                          22-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             spectrometry
                                                                                                                                                                                                                                                                                                                                                                                                                                    22-MAY-2001.
                                                                                                                                                                                                                                                                                                                                                             Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Koester H;
                                                                                                                                                                     AAH41398;
                                                                                            RESULT 969
                                                                                                                AAH41398
                                                                                                                                   à
                                 g
```

```
demonstrate the method of the invention. The method involves use of mass spectrometry for identifying target nucleotide(s) present in nucleic acid molecule(s), detecting a target nucleotide present in a biological sample and determining whether a target nucleotide is present in nucleic acid molecule(s). The method is used for identifying target nucleotide(s) present in a biological sample and detecting a target nucleotide nucleotide present in nucleic acid molecule(s). The target nucleotides are identified and detected in nucleic acid molecule(s). The target nucleotides are identified and detected in nucleic acid molecule(s) browned fingerprint or is individual, and the target nucleotides a DNA fingerprint or is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               indicative of a genetic disease (such as obesity, atherosclerosis, cancer), chromosomal abnormality (either prenatally or postnatally), a genetic predisposition, a fungal, bacterial, or protist infection. The presence of the target nucleotide also indicates the presence of a mutation. They also provide information relating to identity, heredity, or compatibility (human leukocyte antigen (HLA) genotyping). The method is suiteble for the detection of single point mutations or microlesions of DNA and is also applicable in each disease gene or polymorphic region in the genome e.g. variable number of tandem repeats (VNTR) or other single nucleotide polymorphisms (e.g. apolipoprotein gene). The processes described above provide for increased accuracy and reliability of nucleic acid detection by mass spectrometry, in addition the processes allow for regress controls to prevent false positive or false negative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                Sequencing primer; mass spectrometry; DNA fingerprint; obesity; atherosclerosis; cancer; chromosomal abnormality; fungal; bacterial; protist; infection; human leukocyte antigen; HLA genotyping; variable number of tandem repeat; VNTR; apolipoprotein E gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The sequence represents solid sate sequencing primer #3 used to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Use of mass spectrometry for identifying or detecting target nucleotide(s) present in nucleic acid molecule(s).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.4e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 9; Col 45; 95pp; English.
                                                                                                                                               Solid state sequencing primer #3.
                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96US-00617256.
99US-00287679.
                                                                                                                                                                                                                                                                                                                                                                                                                                           99US-00287679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95US-00406199
                                                                                                                                                                                                                                                                        nucleic acid detection; ss.
                 AAS10749 standard; DNA; 15
                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 92.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Koester H, Little DP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (SEQU-) SEQUENOM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-450360/48.
                                                                                                                                                                                                                                                                                                                                                          US6258538-B1.
                                                                                                                                                                                                                                                                                                                                                                                                                                           06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-MAR-1996;
06-APR-1999;
                                                                                                     24-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                   10-JUL-2001
                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                           AAS10749;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
AAS10749
```

0;

792 GGTGCCAAGAGCT 804

à

ő

Gaps

;

92.3%;

792 GGTGCCAAGAGCT 804 GGTTCCAAGAGCT 15

à

12; Conservative

Matches

AAF46555 standard; DNA; 15 BP.

AAF46555

IGFBP2 oligonucleotide #1394.

(first entry)

30-MAR-2001

AAF46555;

```
The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBB], which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAF45153-F45161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, hepplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition such as a neovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          cytostatic; dermatological; cardiant; virucide; ophtialmological; keloid; shi discorder; Insulin-like Growth Factor 1 receptor; IGF-1; pityriasis; IGF binding procein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhees; ruba; keratosis; neophasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neovascular condition; hyperplasia; kidney disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15 BP; 0 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 6; Page 43; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vessels or any other hyperplasia
                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     oligonucleotide #1395.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21-JUN-2000; 2000WO-AU000693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-0140345P
                                                                                                                                                                                                                                AAF46556 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Wraight CJ, Werther GA,
GGTTCCAAGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-041421/05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                            30-MAR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-DEC-2000.
                                                                                                                                                                                                                                                                                                                    AAF46556;
                                                                                                                                                                                      AAF46556
                                                                                                                                  RESULT
```

```
Antisense therapy, antiproliferative, antinflammatory, antipsoriatic, cytostatic, dermatological, cardiant, virucide, ophthalmological, keloid, skin disorder, Insulin-like Growth Factor I receptor; IGF-1, pitrylaais; IGF binding proctein, IGFBP-2, IGFBP3, inflammation, psoriasis, pilaris, growth factor mediated cell proliferation, ichthyosis, serborrhoea, keratosis, neoplasia, scleroderma, wart, skin cancer, sclerotic disease, hyperneovascular condition, hyperplasia, kidney disease, neovascular condition of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [IGF]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inhibiting or reducing growth factor mediated cell proliferation, inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotide which can be used to design the antisense oligonucleotide of the present invention (see AAP45151 and AAP45153. FA5161). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serborrhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina, brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to a method for ameliorating the effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 0 A; 6 C; 2 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 6; Page 43; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     vessels or any other hyperplasia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-JUN-2000; 2000WO-AU000693.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAF46557 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            825 CTGTGTCTCTTTT 837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3 crererecerrir 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Werther GA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2001-041421/05.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
es 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200078341-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              inflammation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-JUN-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-DEC-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wraight CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF46557;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
NOT THE REPORT OF THE PROPERTY OF THE PROPERTY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 д
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

0;

·,

Gaps

. 0

3.9%; Score 11.4; DB 1; Length 15; 22.3%; Pred. No. 6.4e+02; ve 0; Mismatches 1; Indels

92.3%;

Conservative

Best Local Similarity Matches 12; Conserv

Query Match

CTGTGTCTCTTTT 837 CIGIGICCCTITI 14

825 C)

ò

DNA diagnostic mass spectrometry; PCR; primer; ss; genetic disease; chromosomal abnormality; viral infection; fungal infection; bacterial infection; protist infection; human leukocyte antigen;

HLA phenotyping

US6277573-B1

Synthetic.

21-AUG-2001

99US-00287681.

06-APR-1999;

```
Solid state sequencing primer #11.
                                                                                                                                                                                                                                                           3.9%;
                                                                                                                                                                                                                                                                                                              ABK98734 standard; DNA; 15
                                                                                                                                                                                                                                                                             825 CIGIGICICITIT 837
                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                      Crercrician 13
                                                                                                                       Wraight CJ, Werther GA,
                                                                                                                                                                                                                                                                    12; Conservative
                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 12; Conservat
                                                                                                                               WPI; 2001-041421/05
                                                                         WO200078341-A1
                                                                                                                                                       inflammation.
                                                                                                    21-JUN-1999;
                                                                                                                                                                                                                                                                                                                               21-OCT-2002
                                                                                  28-DEC-2000.
                                                                                                                                                                                                                                                                                                                       ABK98734;
                                                                                                                                                                                                                                                                                                     RESULT 974
                                                                Ношо
                                                                                                                                                                                                                                                                                                         ABK98734
ID ABK9
XX
AC ABK9
XX
DT 21-C
XX
DE SOli
```

```
The present invention relates to a method for ameliorating the effects of skin disorders. The method comprises contacting the skin with an antisense oligonucleotide, (for Insulin-like Growth Factor [16F]-1 receptor, IGF binding protein [IGFBP]-2 or IGFBP3), which is capable of inflammation and/or other disorders. The present sequence is an oligonucleotide which can be used to design the antisense oligonucleotides of the present invention (see AAF45151 and AAP45153-154514). The method is useful for ameliorating the effects of psoriasis, ichthyosis, pityriasis, ruba, pilaris, serbornhoea, keloids, keratosis, neoplasias, scleroderma, warts, benign growths, cancers of the skin, a hyperneovascular condition such as a neovascular condition of the retina,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ameliorating the effects of a disorder, e.g. psoriasis, by administering UV (ultra-violet) treatment (optional) and an antisense nucleic acid that inhibits or reduces growth factor mediated cell proliferation and/or
                                                                                                                                                                                               Antisense therapy; antiproliferative; antiinflammatory; antipsoriatic; cytostatic; dermatological; cardiant; virucide; ophthalmological; keloid; skin disorder; Inaulin-like Growth Factor I receptor; IGF1: pityriasis; IGF binding protein; IGFBP-2; IGFBP3; inflammation; psoriasis; pilaris; growth factor mediated cell proliferation; ichthyosis; serborrhoea; ruba; keratosis; neoplasia; scleroderma; wart; skin cancer; sclerotic disease; hyperneovascular condition; hyperplasia; kidney disease; neoplasia; sclerotic serborrhoea; ruba; keratosis; scherotic disease; neoblastic of the retina; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           brain or skin, growth factor-mediated malignancies, other sclerotic disease, kidney disease, hyperproliferation of the inside of blood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 15 BP; 0 A; 5 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Edmondson SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (MURD-) MURDOCH CHILDRENS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 6; Page 43; 201pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     vessels or any other hyperplasia
                                                                                                                    IGFBP2 oligonucleotide #1396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-JUN-2000; 2000WO-AU000693.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99US-0140345P
30-MAR-2001 (first entry)
```

```
The invention relates to a method of detecting target nucleic acid sequences (S) in a biological sample, comprising performing on nucleic acid molecule(s) containing (S), a first polymerase chain reaction (PCR) to produce a first amplification product (P1), performing on P1 a second pCR to produce a second amplification product (P2), and detecting P2 by mass spectrometry, thus detecting the presence of (S) in the biological sample. The method is useful for detecting the presence of target nucleic cample. The method is useful for detecting the presence of target nucleic sample. The method is sample obtained from an individual, and detecting (S) provides a DNA fingerprint or is indicative of a disease or conditions useful infection, and protist infection. The method is useful to diagnose (e.g., prenatally or postnatally) a genetic disease or chromosomal abnormality, a corpostnatally or disease or chromosomal abnormality, a cancer), or infection by a pathogenic organism (e.g., virus, bacteria, parasitic or fungus), or to provide information relating to identity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   heredity, or compatibility (e.g. human leukocyte antigen (HLA)
phenotyping). The method is fast, highly accurate and reliable. ABK98702-
ABK98839 represent primers and DNA sequences used in examples which
                                                                                                                                                                                                                                                                                                                                                                                                                          diagnosing
ying nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                        Detecting target nucleic acid sequence in sample, useful for diagnosing genetic disease or chromosomal abnormality, comprises amplifying nucleic acid containing target sequence and detecting amplified product by mass
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mass spectrometry; diagnosis; genetic disease; chromosomal abnormality;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oligonucleotide #7, used in sequencing and mass spectrometer detection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.4; DB 1; Length 15; 92.3%; Pred. No. 6.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           demonstrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 9; Col 41; 92pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                         95US-00406199.
96US-00617256.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAD20801 standard; DNA; 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           792 GGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                               SEQU-) SEQUENOM INC
                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2001-540404/60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
es 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    spectrometry.
                                                                                                                                                                                                                                                                            .8-MAR-1996;
                                                                                                                                                                                                                                                           17-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  04-JAN-2002
                                                                                                                                                                                                                                                                                                                                                     Koester H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAD20801;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAD20801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
```

ö

Gaps

ö

1; Indels

0; Mismatches

ВР

Score 11.4; DB 1; Length 15; Pred. No. 6.4e+02;

```
ð
                                                                                                                                                                                                                                                                                                                                                           qq
                                                                                                                                                                                                                                                                                                                                                                                                                          ;
0
                                                                                                                                                                                                                                                                                The invention relates to mass spectrometric processes useful for detecting nucleic acids in a biological sample, comprises amplifying nucleic acid molecules and analysing using matrix-assisted laser describion/ionisation (MALDI) time-of-flight (TOF) mass spectrometry. The methods are used to diagnose (e.g., prenatally or postnatally) a genetic disease or chromosomal abnormality; a predisposition to a disease or condition (e.g., obesity, atherosclerosis, cancer), or infection by a pathogenic organism (e.g., virus, bacteria, parasite or fungus); or to provide information relating to identity, heredity, or compatibility (e.g., HIA phenotyping). The present sequence is an oligonucleotide used in solid state sequencing and mass spectrometer detection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Diagnosis; genetic disease; chromosomal abnormality; infection; heredity; mass spectrometry; ss.
                                                                                                                                                                                                                      Detecting target nucleic acid sequences in a biological sample comprises amplifying NA molecules and analyzing using matrix-assisted laser desorption/ionization time of flight mass spectrometry.
obesity; atherosclerosis; cancer; infection; viral; bacterial; fungal; matrix-assisted laser desorption/ionisation; MALDI; HLA phenotyping; heredity; mass spectrometry; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.4; DB 1; Length 15; 12.3%; Pred. No. 6.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15mer oligonucleotide related to the invention #1.
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No. 6.4e
                                                                                                                                                                                                                                                                 Example 9; Col 41; 90pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAD07216 standard; cDNA; 15 BP.
                                                                                                      31-JAN-2000; 2000US-00495444.
                                                                                                                           95US-00406199.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99US-00431613.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95US-00406199.
96US-00617256.
                                                                                                                                                                                                                                                                                                                                                                                                                                            92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          792 GGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 GGrrccaagacr 15
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                          (SEQU-) SEQUENOM INC
                                                                                                                                                                                                 WPI; 2001-624663/72.
                                          Unidentified
                                                              US6300076-B1
                                                                                                                           17-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          06-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US6221601-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            02-NOV-1999;
                                                                                                                                     18-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-MAR-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-MAR-1996;
                                                                                   09-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-APR-2001
                                                                                                                                                                               Koester H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAD07216;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 976
 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            qq
```

```
Detecting a target nucleic acid sequence, useful for diagnosing a genetic disease, a chromosomal abnormality or an infection by a pathogen, or for determining identity or heredity, by employing mass spectrometry-based
                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence, useful for diagnosing a genetic disease, a chromosomal abnormality or an infection by a pethogen and for determining identity or heredity by employing mass spectrometry-based processes. The method involves hybridising a primer to a nucleic acid molecule comprising a primer acid sequence, extending the primer using a polymerase to produce an extension product, selectively cleaving the 5' end of the primer from the extension product to produce a portion of the primer and a cleaved extension product and detecting the cleaved extension product by mass spectrometry. The present sequence is an oligonucleotide related to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Solute carrier family 6 neurotransmiter transporter; sectonin 4; SLC6A4; genotyping; allele specific oligonuclectide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New isolated polynucleotide comprising a polymorphic variant for the solute carrier family 6 neurotransmitter transporter, serotonin member 4 gene for identifying drugs for treating disorders related to expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to detecting a target nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Stephens JC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 11.4; DB 1; Length 15;
Pred. No. 6.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human SLC6A4 allele-specific oligonucleotide primer #8.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sanchis A,
                                                                  Braun A;
                                                                  Little DP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nandabalan K,
                                                                                                                                                                                                                                                                                                                                                           Disclosure; Col 45; 94pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 12; Page 21; 152pp; English,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAF73888 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-JUL-2000; 2000WO-US020638.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99US-0146290P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      792 GGTGCCAAGAGCT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.9°
Best Local Similarity 92.3
Matches 12; Conservative
                                                                  Koester H, Higgins GS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3 GGTTCCAAGAGCT
(SEQU-) SEQUENOM INC.
                                                                                                                                  WPI; 2001-327240/34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Denton RR, Duda A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2001-123317/13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             of the protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200109161-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-FEB-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAF73888;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF73888
```

ö

The present invention relates to a polymorphic variant of a reference sequence for the solute carrier family 6 neurotransmitter transporter, sectornin member 4 (SLC6A4) gene or a fragment of it or a sequence complementary to the first sequence. The invention is used in producing a recombinant organism that can be used to express SLC6A4 for protein structure analysis and binding studies. A composition comprising a genotyping oligonucleotide is used to detect a polymorphism in the SLC6A4 gene 22222222222

Sequence 15 BP; 2 A; 11 C; 0 G; 2 T; 0 U; 0 Other;

0; Score 11.4; DB 1; Length 15; Pred. No. 6.4e+02; 0; Mismatches 1; Indels 1; Indels 3.9%; 923 CACCACCACCTC 935 CTCCACCACCTC 15 12; Conservative Query Match Best Local Similarity m Matches 셤 ò

.; 0

Gaps

RESULT 978

ABA97029 standard; DNA; 15 (first entry) 18-JUN-2002 ABA97029; ABA97029 

BP

ZFP36 allele-specific primer for detecting polymorphisms SEQ ID 30

antiarthritic; drug screening; isogene; haplotype pair; autoimmune disease; rheumatoid arthritis; haplotyping; genotyping; allele specific oligonucleotide; ASO; single nucleotide polymorphism; SNP; zinc finger protein; mouse zfp-36; ss; gene therapy; transgenic; Polymorphic variant; ZFP36; immunosuppressive; antirheumatic; primer.

Homo sapiens.

WO200179226-A2

25-OCT-2001.

13-APR-2001; 2001WO-US012254

13-APR-2000; 2000US-0196602P.

(GENA-) GENAISSANCE PHARM INC.

Parks KE; Koshy B, Choi JY, Kliem SE,

WPI; 2002-075059/10.

Novel polymorphic variants of zinc finger protein homologous to zfp-36 in mouse gene, useful in studying expression and function of the protein, useful for screening drugs to treat diseases e.g. rheumatoid arthritis.

Claim 16; Page 13; 60pp; English

The present sequence is that of an oligonucleotide used for assaying a polymorphism in the zinc finger protein homologous to zfp-36 in mouse (ZFP56) gene of the invention. The specification describes a newly isolated polynucleotide comprising a sequence which is a polymorphic variant (PV) of a reference sequence for the ZFP36 gene (see ABA97001) or its fragment and its encoded protein. The ZFP36 polynucleotides and polypeptides have antirheumantic, immunosuppressive and antiarthritic activities. The ZFP36 polypeptide is useful for screening drugs targeting the ZFP36 polypeptide or haplotype pairs are useful for improving the efficiency and reliability of the discovery and development of fungs for treating diseases associated with ZFP36 activity, e.g., autoimmune diseases such as rheumatoid arthritis. Haplotyping the ZFP36 gene in an individual gives useful information for validating ZFP36 as a candidate target for treating a specific condition predicted to be

```
individual can give information used for developing diagnostic tests and therapeutic treatments. The isolated polymucleotide is useful in studying the expression and function of ZFP56 and in drug screening. Antibodies specific for the ZFP56 protein are useful in many diagnostic and prognostic formats and therapeutic methods. A recombinant non-human organism transformed with the ZFP36 gene is useful in studying expression of the ZFP36 isogenes in vivo, for in vivo drug screening and testing. Allele-specific oligonucleotides (ASO) are useful as probes and primers
associated with ZFP36 activity. Genotyping the ZFP36
                                                                                                                                                                                                                                                                              and for assaying a polymorphism in the target region
8.5.6.6.6.6.6.6.6.6.6.6.6
```

Sequence 15 BP; 2 A; 4 C; 6 G; 2 T; 0 U; 1 Other;

Gaps 0 3.9%; Score 11.4; DB 1; Length 15; 80.0%; Pred. No. 6.4e+02; Indels Mismatches 1; 757 Conservative 743 GGTAGGGTCCCAGGG Query Match Best Local Similarity 12; Matches g ð

ö

RESULT 979

AAS14452 standard; DNA; 15 AAS14452;

BP.

23-APR-2002

(first entry)

ASO primer #15 to detect human SCYA1 gene polymorphisms.

Human, single nucleotide polymorphism; SNP; SCYA1; chromosome 17; small inducible cytokine Al-I-309; haplotyping; gencyatherosclerosis; human immunodeficiency virus; HIV infection; allele-specific oligonucleotide; ASO; primer; ss.

Homo sapiens.

WO200179236-A2

16-APR-2001; 2001WO-US012305.

14-APR-2000; 2000US-0197119P

(GENA-) GENAISSANCE PHARM INC.

Stephens Sausker EA, Koshy B, Kliem SE, Choi JY,

WPI; 2002-075066/10.

Genotyping human small inducible cytokine A1-I-309, homologous to mou: Tca-3 gene of individual, involves determining identity of nucleotide pair at specific polymorphic sites for two copies of the gene individual, involves determining identity

Claim 15; Page 13; 58pp; English.

The present invention relates to novel single nucleotide polymorphisms (SNPs) in the human small inducible cytokine Al-I-309 (SCYA1) gene located on chromosome 17, and methods for haplotyping and/or genotyping the SCYA3 gene. The methods of the invention make use of allele-specific oligonucleotides (ASOS) as probes and primers and/or primer-extension oligonucleotides for detecting the SCYA1 gene polymorphisms. The polymucleotides and screened compounds are useful for the treatment of diseases associated with SCYA1 activity, such as atherosclerosis, human immunodeficiency virus (HIV) infection, and other inflammatory disorders.

AASI4438 AASI4455 represent ASO primers for detecting human SCYA1 gene oolymorphisms

Sequence 15 BP; 1 A; 5 C; 1 G; 7 T; 0 U; 1 Other;

Best Local Similarity

. 0

ð

```
The invention comprises DNA, cDNA and protein sequences of the human electron-transfer flavoprotein, beta polypeptide (ETFB) gene (located on chromosome 19q13.3-13.4). The invention specifically relates to the identification of 27 novel polymorphic sites within the ETFB gene.

Electron-transfer flavoprotein (ETF) is an obligatory electron acceptor for nine primary flavoprotein (ETF) is an obligatory electron acceptor mitochondrial matrix. ETF is composed of an alpha (ETFA) and a beta (ETFB) subunit. Electrons accepted by ETF are transferred to the mitochondrial respiratory chain by ETF dehydrogenases (ETFPHs).

CC peficiency of ETF or ETFDH leads to glutaric acidaemia type IT (GAII). Therefore ETFB is a pharmaceutically important gene in the treatment of GAII. The novel ETFB polymorphisms identified in the invention are useful for genotyping and haplotyping the ETFB gene of an individual. The ETFB protein and nucleic acids of the invention are useful for sepression and function of ETFB in vivo. The ETFB protein and mucleic acids are also useful for testing the efficacy of therapeutic and and class are also useful for testing the efficacy of therapeutic and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Novel isolated human electron-transfer-flavoprotein, beta polynucleotide, useful for therapeutic purposes, for studying the expression and function of the polynucleotide, and for expressing the flavoprotein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; electron-transfer flavoprotein beta polypeptide; ETFB; electron acceptor; mitochondrial matrix; glutaric acidaemia type II; novel polymorphic site; novel polymorphism; ETFB genotype; 85; GAII; ETFB haplotype; transgenic animal; primer; probe; chromosome 19q13; primer-extension oligonucleotide; single nucleotide polymorphism; SNP.
                                                                                      Gaps
                                                                                          .
0
3.9%; Score 11.4; DB 1; Length 15; 00.0%; Pred. No. 6.4e+02; ve 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human ETFB allele-specific oligonucleotide primer 18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Kazemi A, Koshy B;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Claim 17; Page 14; 143pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bentivegna SC, Bieglecki KM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABL39458 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUL-2001; 2001WO-US021306.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-JUL-2000; 2000US-0215984P.
                                                                                                                                                                                 831 CICITITICITCIC 845
                                                 80.08;
                                                                                                                                                                                                                                                              crcrcrrarrcrcrg 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22-APR-2002 (first entry)
                                                                                          12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-154722/20.
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200202580-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   10-JAN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABL39458;
                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABL39458
```

allele-specific probes. Nucleic acids ABL39441-ABL39494 represent claimed ETFB allele-specific PCR primers. Nucleic acids ABL39495-ABL39548 represent claimed ETFB primer-extension oligonucleotides

3.9%; Score 11.4; DB 1; Length 15;

Query Match

Sequence 15 BP; 3 A; 10 C; 1 G; 0 T; 0 U; 1 Other;

compounds for glutaric acidaemia type II. The nucleic acids of the invention are useful in the production of a transgenic animal expressing the ETFB gene. Nucleic acids ABL39414-ABL39440 represent claimed ETFB

```
The invention relates to single nucleotide polymorphisms in the gene encoding the human caspase 5, apoptosis-related cysteine protease (CASP5) to Dypeptide. A method for haplotyping the CASP5 gene in an individual comprises identifying the nucleotide at one or more polymorphic sites and determining whether one of the copies of the gene is defined by one of the CASP5 haplotypes given in the specification or whether both copies are defined by a haplotype pair. This method is useful in genotyping, whereby all possible haplotype pairs can be assigned to specific genotypes. An association between a trait and a haplotype or haplotype or haplotype or haplotype pair in a population exhibiting the trait with the haplotype or haplotype pair in a population exhibiting the trait with the frequency of the haplotype or haplotype pair in a reference computation, where a higher haplotype frequency in the trait population indicates the trait is associated with the haplotype or haplotype pair. CASP5 and its corresponding DNA are used for studying the expression and function of CASP5, for use in screening for candidate drugs to treat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                  ó:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     diseases related to CASP5 activity, such as cancer (e.g. hereditary nonpolyposis colorectal cancer, 9strointestinal tumours and endometrial tumours). Sequences ABK81489-4481519 represent allele-specific oligonucleotide sequencing primers used to detect CASP5 gene
                                                                                                                                                                                                                                                                                                                                                             Human; caspase 5; apoptosis-related cysteine protease; CASP5; primer; haplotyping; haplotype pair; cancer; single mucleotide polymorphism; hereditary nonpolyposis colorectal cancer; gastrointestinal tumour; endometrial tumour; chromosome 11q22.2-q22.3; sequencing.
                                                                                                                                                                                                                                                                                                                       Human CASP5 gene allele-specific oligonucleotide sequencing primer #3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Novel caspase 5 apoptosis-related cysteine protease, useful
therapeutically and in screening for drugs targeting protease
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 11.4; DB 1; Length 15;
Pred. No. 6.4e+02;
1; Mismatches 2; Indels
                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 15 BP; 5 A; 3 C; 4 G; 2 T; 0 U; 1 Other;
80.0%; Pred. No. 6.4e+02;
ive 1; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 14; Page 14; 115pp; English.
                                                                                                                                                                                                     ABK81482 standard; DNA; 15 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           29-SEP-2000; 2000US-0236568P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-OCT-2001; 2001WO-US030878.
                                                            921 ATCACCACCACCTC 935
                                                                                                  1 AGCCCCACCACCYC 15
                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 80.03
Matches 12; Conservative
                       12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (GENA-) GENAISSANCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Choi JY, Kliem SE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-435191/46.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200226769-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens.
                                                                                                                                                                                                                                                                                 13-AUG-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-APR-2002.
                                                                                                                                                                                                                                           ABK81482;
                       Matches
                                                                                                                                                                                  ABK81482,
                                                                                                                                                                                                                          ð
                                                                                                    g
```

```
The invention relates to detecting a target nucleic acid sequence present in a biological sample or in a nucleic acid molecule, comprising detecting a hybridised oligonucleotide or a cleavage product by mass spectrometry (e.g. matrix assisted laser desorption/ionisation time-of-flight (MALDI-TOF), Electrospray (ES), ion cyclotron resonance (ICR) and fourier transform) as a indication of the presence of the target nucleic acid. The method is useful for detecting nucleic acid molecules and sequences in the molecules. The method is particularly useful for disease (e.g. oystic fibrosis, hasemophilias, thalassaemias, Duchenne muscular dystrophy, Huntingdon's disease and Alzheimer's disease), or a chromosomal abnormality (e.g. in Down's Syndrome, Patau syndrome, Patau syndrome, sparation so a chromosomal abnormality (e.g. in Down's Klinefelter's syndrome, a predisposition to a disease/condition (autoimmune diseases, diabetes, cancer, obesity and arteriosclerosis) or infection by a pathogen (e.g. human immunodeficiency virus, HIV, infection or hepatitis B virus infection), or for determining identity or heredity. The present sequence is a solid state sequencing template used controcons.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Use of mass spectrometry for detecting hybridized oligonucleotide or a cleavage product of a target nucleic acid sequence, especially useful for diagnosing a genetic disease, chromosomal abnormality or infection by a
                                                                                                                                                                                                                                                                                               ds; template; mass spectrometry; MALDI-TOF; Electrospray; ES; ion cyclotron resonance; ICR; fourier transform; cystic fibrosis; matrix assisted laser desorption/ionisation time-of-filipht; haemophilia; thalassaemia; Duchenne muscular dystrophy; huntingdon's disease; Alzheimer's disease; genetic disease; chromosomal abnormality; bown's syndrome; patu syndrome; Edward's syndrome; Rinefelter's syndrome; attoimmune disease; diabetes; cancer; obesity; arteriosclerosis; infection; human immunodeficiency virus infection; HIV; heredity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 15 BP; 3 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                            Solid state sequencing template sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 9; Col 43; 92pp; English.
                                                                                                                                        ABK11880 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95US-00406199.
96US-00617256.
806 TCCTCCAACTCAGGG 820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99176E00-SU66
                                                                                                                                                                                                                      (first entry)
                       15 TMCTTCAACTCTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SEQU-) SEQUENOM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2002-224109/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US6268144-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15-SEP-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17-MAR-1995;
18-MAR-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  spectroscopy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       31-JUL-2001.
                                                                                                                                                                                                                      05-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Koester H;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic.
                                                                                                                                                                                ABK11880;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             pathogen
                                                                                                                                        8
                                   q
```

Score 11.4; DB 1; Length 15; Pred. No. 6.4e+02;

3.9%;

Query Match Best Local Similarity

```
The present invention relates to a new novel polynucleotide with a sequence having a solute carrier family 26, member 2 (SLC26A2) isogene sequence having a solute carrier family 26, member 2 (SLC26A2) isogene selected from 4 isogenes, with regions of a sequence of 12212 bp as given in specification. The new polynucleotide is also defined by a corresponding set of polymorphisms whose locations and identities are useful for improving the efficiency and reliability of several steps in the slocked provery and development of drugs for treating diseases associated with SLC26A2 activity e.g. osteochondrodysplasias. The methods of the invention are useful for haplotyping and genetyping the SLC26A2 gene in individual. Allele-specific oligonucleotides (ASO) are useful as probes and primers, and for assaying a polymorphism in the target region. Without requiring any a prior knowledge of the phenotypic effect of any particular SLC26A2 polymorphism, the methods of the invention provide the continity with a tool to identify lead compounds that are more likely to show efficacy in clinical trials. The present nucleic acid sequence checked and provided provided the show efficacy in clinical trials. The present nucleic acid sequence corresponds that are more likely to show efficacy in clinical trials. The present nucleic acid sequence.
ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 used in the invention to detect polymorphisms in the human SLC26A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel genetic variants of solute carrier family 26, member 2 isogene useful in studying expression and function of the protein, and for screening drugs to treat diseases e.g. osteochondrodysplasias.
    Gaps
                                                                                                                                                                                                                                                                                                                                   Human; probe; solute carrier family 26 member 2; SLC26A2; SNP;
single nucleotide polymorphism; osteochondrodysplasias; haplotyping;
genotyping; allele-specific oligonucleotide; ASO; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٥.
  ٥.
                                                                                                                                                                                                                                                                                              ASO probe #1, used to detect human SLC26A2 gene polymorphisms.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 11.4; DB 1; Length 15;
Pred. No. 6.4e+02;
1; Mismatches 2; Indels
  Indels
  ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seguence 15 BP; 4 A; 5 C; 2 G; 3 T; 0 U; 1 Other;
  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 17; Page 13; 72pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tanguay DA;
0;
                                                                                                                                                                             ABK12921 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENA-) GENAISSANCE PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22-JUN-2001; 2001WO-US020028.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             22-JUN-2000; 2000US-0213284P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15 CTGGGTAYAGGACTT 1
                                       804
                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match 3.9%
Best Local Similarity 80.0%
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                728 CTGGTCATAGGACTT
12; Conservative
                                       792 GGTGCCAAGAGCT
                                                                              3 GGTTCCAAGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Koshy B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2002-130788/17
                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200198318-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                           23-APR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Kliem SE,
                                                                                                                                                                                                                    ABK12921;
                                                                                                                                        RESULT 983
Matches
                                                                                                                                                            ABK12921/
                                                                                                                                                                                                                    à
                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   d
```

(first entry)

23-DEC-2002

ABX00789;

```
The present invention relates to genetic variants of human neurotrophin (NTF) 3 gene. The invention also relates to compositions and methods for haplotyping and/or genotyping the NTF3 gene in an individual. Sequences of the invention are useful for studying the expression and function of NTF3 protein for use in screening for candidate drugs to treat diseases related to NTF3 activity. The polymorphism and haplotype data is useful for validating whether NTF3 is a suitable target for drugs to treat nervous system disorders and congenital heart defects, screening for such drugs and reducing bias in clinical trials of such drugs. They are also useful for therapeutic purposes. The haplotyping method is useful for improving the efficiency and outcome of several steps in the discovery and development of drugs for treating diseases associated with NTF3 activity such as nervous system diseases and congenital heart defects. It is also useful for validating NTF3 as a candidate target for treating a specific condition or disease predicted to be associated with NTF3 activity. The method is also useful for screening compounds to treat a specific condition or disease predicted to be associated with NTF3 and activity. The method is also useful for screening compounds to treat a specific condition or disease predicted to be associated with NTF3 and activity.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel polymorphic variants of neurotrophin 3 (NTF3), useful for studying the expression and function of NTF3, and for screening candidate drugs to treat nervous system disorders and congenital heart defects.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     activity. Sequences of the invention are also used in gene therapy. The present DNA sequence is an allele-specific oligonucleotide (ASO) probe used to detect human NTF3 gene polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, genetic variant, neurotrophin 3; NTF3; haplotyping; genotyping; nervous system disorder, congenital heart defect, gene therapy; therapeutic; polymorphism; allele-specific oligonucleotide; ASO probe;
                                                                                                                                                                                                                                                                                                                                                                  Human neurotrophin 3 (NTF3) gene polymorphism detecting ASO probe #5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.4; DB 1; Length 15; 00.0%; Pred. No. 6.4e+02; Ve 1; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 15 BP; 5 A; 3 C; 3 G; 3 T; 0 U; 1 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 17; Page 13; 60pp; English.
                                                     AAD32304 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (GENA-) GENAISSANCE PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              04-AUG-2000; 2000US-0223208P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-AUG-2001; 2001WO-US024665.
                                                                                                                                                                                                                                                                  18-JUN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 80.0°
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kliem SE, Koshy B,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-269092/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200212499-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14-FEB-2002.
                                                                                                                                                           AAD32304;
AAD32304/
```

```
The present invention relates to enzymatic nucleic acids which specifically cleave RNA derived from Hepatitis C virus (HCV). The enzymatic nucleic acid or ribozyme is in a hammerhead (HH) or hairpin (HP) motif where the binding arms comprise sequences complementary to one of the substrate sequences defined in the specification. The HCV ribozymes are useful for modulating the expression and/or replication of HCV. They can be used to treat cirrhosis, liver failure and/or replication of hepatocellular carcinoma. The HCV ribozymes are also useful for treating a condition associated with HCV infection in conjunction with one or more other drug therapies, particularly type I interferon, especially interferon alpha, beta or gamma or consensus interferon. The present sequence represents a substrate for a HCV hammerhead (HH) ribozyme. Note: Some of the sequence data for this patent was printed specification. The complete sequence data for this patent was betained in electronic format directly from the USPTO web site at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New ribozymes targeting RNA derived from hepatitis C virus inhibit viral replication and are useful to treat hepatitis C virus infections and cirrhosis, liver failure or hepatocellular carcinoma.
                                                                                                                           Enzymatic nucleic acid, RNA cleavage, Hepatitis C virus infection, HCV ribozyme; HCV expression, HCV replication; cirrhosis, virucide; liver failure, hepatocellular carcinoma, HCV infection, drug therapy; type I interferon; interferon alpha; interferon beta; cytostatic; interferon gamma; consensus interferon; hepatotropic; antiinflammatory; substrate; hammerhead ribozyme; HH ribozyme; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                          Hepatitis C virus substrate #571 for HCV hammerhead ribozyme #571.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.4; DB 1; Length 15; 69.2%; Pred. No. 6.4e+02; ive 3; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Macejack D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15 BP; 4 A; 6 C; 2 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Roberts B, Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             seqdata.uspto.gov/psipsDIDEntry.html
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 1; Page 38; 80pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABL36351 standard; DNA; 15 BP.
                                                                                                                                                                                                                                                                                                                                                                              99US-00274553.
                                                                                                                                                                                                                                                                                                                                                                                                                 99US-00274553.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            805 CTCCTCCAACTCA 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ouery Match
Best Local Similarity 69.2
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Blatt L, Mcswiggen JA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLATT L.

MCSWIGGEN J A.

ROBERTS B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3 cuecuccaacuca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-617759/66.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (MACE/) MACEJACK D.
                                                                                                                                                                                                                                                              Hepatitis C virus.
                                                                                                                                                                                                                                                                                                    US2002082225-A1.
                                                                                                                                                                                                                                                                                                                                                                          23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                 23-MAR-1999;
                                                                                                                                                                                                                                                                                                                                         27-JUN-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABL36351;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MCSW/)
(ROBE/)
(PAVC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (BLAT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABL36351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              K K B
d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

0;

0;

Gaps

·,

ABX00789 standard; RNA; 15 BP.

RESULT 985 ABX00789 ID ABX0

837 TCTTCTCTGAAGACA 851

ð d

rgrrcrcycaagrca 1

15

80.08;

rng.res

26-FEB-2002 (first entry)

AAS95905;

```
(first entry)
                                              Messer C,
                                                  WPI; 2002-154563/20
                                                                                                             oligonucleotides
                           WO200194362-A2
                       Homo sapiens
 22-APR-2002
                               13-DEC-2001
                                              Kliem SE,
                                                                                                                     Query Match
```

Gaps ö 3.9%; Score 11.4; DB 1; Length 15; 80.0%; Pred. No. 6.4e+02; rive 1; Mismatches 2; Indels Sequence 15 BP; 1 A; 3 C; 7 G; 3 T; 0 U; 1 Other; 928 CCACCCTCCAGAGAA 942 Conservative Local Similarity 12; Best Loca Matches

ö

CYCCCTCCAGAGGA 15

Human; ss; lysosomal acid phosphatase 2; ACP2; gene; chromosome 11; lysosome-specific enzyme; orthophosphoric monoester hydrolysis; Hodgkin's disease; HD; acid phosphatase deficiency; novel polymorphic site; ACP2 haplotype; ACP2 genotype; polymorphism; transgenic animal; primer; probe; primer-extension oligonucleotide; SNP; single nucleotide polymorphism. Human lysosomal acid phosphatase 2 (ACP2) allele-specific PCR primer 31. Tanguay DA; (GENA-) GENAISSANCE PHARM INC 07-JUN-2001; 2001WO-US018457. 07-JUN-2000; 2000US-0210047P.

Novel genetic variants of acid phosphatase 2, lysosomal polypeptide useful in studying expression and function of the protein, and for screening drugs to treat diseases e.g. Hodgkin's disease.

Claim 17; Page 14; 109pp; English

The invention comprises the human lysosomal acid phosphatase 2 (ACP2)

uucleic acid and protein sequences. Specifically, the invention relates

to the discovery of 22 novel polymorphic sites within the APC2 gene. The

invention also comprises methods for haplotyping and genotyping the ACP2

gene in an individual. The ACP2 gene (located on chromosome 11) encodes a

tysosomal-specific enzyme that catalyses the hydrolysis of

cytosomal-specific arryme that catalyses the hydrolysis of

cytosomal-specific progratuate deficiency. The novel ACP2 gene and

cytosomal and acid phosphatase deficiency. The novel ACP2 gene

cytosomal and acid phosphatase deficiency. The novel ACP2 gene

cytosomal specific novertion are useful in haplotyping the ACP2 gene

cytosomal specific cheatened disease or condition (e.g. Hodgkin's

cytosomal acid phosphatase deficiency). The ACP2 gene polymorphisms are

cytosomal acid phosphatase deficiency). The ACP2 gene polymorphisms are

cytosomal acid phosphatase deficiency). The ACP2 gene polymorphisms are

cytosomal acid phosphatase deficiency). The ACP2 gene polymorphisms are

cytosomal acid phosphatese deficiency of a transgenic acids of

chests and therapeutic treatments. The ACP2 gene polymorphisms are

cytosomal in the production of a transgenic animal which

expresses ACP2 protein. The ACP2 nucleic acids of the invention are

useful in the production of a Lallele-specific oligonucleocides designed to

cytosomal production of allele-specific probes. Nucleic acids ABL36321
cytosomal acids and acids acids of the access and therapeutic acids and acids acids acids of a production of a transgenic acids acids of acids and acids and acids and acids and acids and acids and acids acids and acids acids and acids and acids acids acids acids acids acids acids and acids ABL36365-ABL36408 represent claimed ACP2 primer-extension

AAS95905 standard; DNA; 15 BP RESULT 987 AAS95905/c ID AAS95 XX

The invention relates to an isolated polymucleotide comprising a sequence selected from a polymorphic variant of calmodulin 1 (CALM1). The polymorphic variant comprises an CALM1 isogene defined by a haplotype selected from haplotypes 1-21 given in the specification. The polymorphisms are useful for studying the biological function of CALM1 as well as in identifying drugs targeting this protein for the treatment of a disorder related to its abnormal expression or function. The polymorphic variants may also be used in screening for compounds targeting CALM1 to treat a specific condition or disease predicted to be associated with CALM1 activity. Establishing CALM1 haplotype or haplotype pair of an individual is useful for improving the efficiency and certaing diseases associated with SCYR3 activity, e.g. Alzheimer's disease and diseases involving defects in calcium-dependent signal continual design of clinical trials of candidate drugs for treating as leading to the calcium of the cal New calmodulin-1 (CALM-1) isogene polymorphic variants, useful in expressing CALM1 protein for use in screening for candidate drugs to treat diseases related to CALM1 activity such as Alzheimer's disease. specific condition or disease predicted to be associated with CALMI activity. AAS9204AAS96018 represent human CALMI allele- specific oligonucleotides and pro maintain a feet of the same and properties. Calmodulin 1; CALM1; human; single nucleotide polymorphism; SNP; haplotyping; SCYA3; Alzheimer's disease; drug screening; calcium-dependent signal transduction; PCR primer; ss. .. 3.9%; Score 11.4; DB 1; Length 15; 80.0%; Pred. No. 6.4e+02; ive 1; Mismatches 2; Indels Stephens JC; - fuman CALM1 gene allele-specific oligonucleotide #14. oligonucleotides and PCR primers of the invention Sequence 15 BP; 3 A; 5 C; 5 G; 1 T; 0 U; 1 Other; Koshy B, Choi JY, Claim 15; Page 13; 82pp; English. (GENA-) GENAISSANCE PHARM INC BP. 39-APR-2001; 2001WO-US011509. 12-APR-2000; 2000US-0196340P 755 GGGTCCCTAGGCCTC 769 80.08; ADC84146 standard; DNA; 15 15 GGTTCGCYAGGCCTC 1 Conservative Chew A, WPI; 2002-049190/06. Local Similarity es 12; Conserv WO200179218-A2. Bentivegna SC, Homo sapiens 25-OCT-2001 Query Match Matches RESULT 988 ADC84146 ₹ ****

ADC84146;

ö

Human papillomavirus type 62 (HPV 62) detection oligonucleotide #1.

(first entry)

01-JAN-2004

```
05-JUL-1993;
                                                                                                                                                                                                                                                                                                                                                                                                   AAQ83162;
                                                                                                                                                                                                                                                                                                                                                              RESULT 990
                                                                                                                                                                                                                                                                                                                                                                       AAQ83162
                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                 ਨੇ
                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                             The invention comprises oligonucleotides for detecting and identifying subtypes of human papilloma virus (HPV) contained in a sample. The oligonucleotides of the invention are useful for simultaneously detecting and identifying subtypes of HPVs. The present DNA sequence represents an HPV detection oligonucleotide of the invention.
                                                                                                                                                                              Detector for identifying human papilloma virus subtypes, comprises carrier having two parts carrying first and second oligonucleotides that respectively hybridize with DNA contained in first and second subtypes of
                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Primer; PCR; amplification; expression vector; plasmid; antibody; light chain; heavy chain; constant region; promoter; signal peptide; variable-region library; transmembrane domain; membrane; human; varigen-differentiated antibody; monoclonal antibody; antigen; ss.
probe; human papilloma virus; HPV; detection; identification; ss.
                                                                                                                                  Fan C;
                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PCR primer #1 for cloning an antibody variable region library.
                                                                                                                                                                                                                                                                                                                         Ouery Match 3.9%; Score 11.4; DB 1; Length 15; Best Local Similarity 92.3%; Pred. No. 6.4e+02;
                                                                                                                                  Lin Y,
                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                 Lee H,
Chan P;
                                                                                                                                                                                                                                                                                                        Sequence 15 BP; 1 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                  Lee B,
Pan C, (
                                                                                                                                                                                                                              Claim 4; SEQ ID NO 376; 221pp; English.
                                                                                                                                  Huang H,
Kao Y, I
                                                                                                                (KING-) KING CAR FOOD IND CO LID
                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ95497 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ASAH ) ASAHI KASEI KOGYO KK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94WO-JP002033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93JP-00303620
                   Human papillomavirus type 62.
                                                                           10-OCT-2001; 2001EP-00123379.
                                                                                             10-OCT-2001; 2001EP-00123379
                                                                                                                                                                                                                                                                                                                                                              765 GCCTCCACTTCTG 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     31-JAN-1996 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                3 GCCTCCACTGCTG 15
                                                                                                                                                                                                                                                                                                                                             12; Conservative
                                                                                                                                  You C, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Higuchi K, Kanno K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1995-215273/28
                                                                                                                                                              WPI; 2003-432398/41.
                                                                                                                                  Lin R, Shih C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               32-DEC-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          W09515393-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             08-JUN-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 03-DEC-1993;
                                      EP1302550-A1
                                                         16-APR-2003.
                                                                                                                                                                                                             the virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAQ95497;
                                                                                                                                  Lin C,
Hsu H,
                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 989
                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                  à
                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
Primers AAQ95497-8 were used to generate a fragment containing a multicloning site in the novel plasmid pSE. This plasmid is derived from pSC (a pucl8 based plasmid) which contains an antibody light chain (C-kappa) and heavy chain (C-gamea). Constant region coding sequence, each under control of the SR-alpha promoter and linked to an appropriate signal peptide sequence. The light and heavy chain sequences have restriction sites created at the 5' ends of the coding sequences for the insertion of an antibody variable-region library created using the primers AAQ95503-39. The primers AAQ9549-8 were used to create an extra ECC primers AAQ55503-39. The primers AAQ9549-8 were used to create an extra ECC primers AAQ95503-39. The library is inserted in frame with constant region coding sequence. The library is inserted in frame with carry chain constant region is also linked to a transmembrane domain. Thus expression produces from the vector will form an antibody which are membrane-bound. The vectors are used for the preparation of an antibody variable base sequence of an antipodic for the preparation of an antibody using these antibodies allow production of a human monoclonal antibody
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
Novel expression screening vector - used for preparing an antibody variable region library comprising eukaryotic cells expressing membrane-bound polypeptide at the cell surface.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /*tag= c
/note= "joined by phosphorothiote linkage in oligomer
(III), claim 5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \overset{\mathbf{a}}{\text{"joined}} by phosphorothiote linkage in oligomer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2. .3
*tag= b
/note= "joined by phosphorothiote linkage in oligomer
[II), Claim 3"
i6. .17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Phosphorothioate-contg. oligomer, forms triple-helix with SV40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Triple helix; triplex; formation; inhibition; gene expression; phosphorothioate backbone; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 3.9%; Score 11.4; DB 1; Length 16; Best Local Similarity 92.3%; Pred. No. 6.9e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 16 BP; 2 A; 7 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                                     Example 2; Page 15; 42pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (III), Claim 5"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ83162 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93JP-00191766.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   749 GTCCCAGGGTCCC 761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 Greceagarece 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   'note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            against an antigen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JP07023789-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27-OCT-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-JAN-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Synthetic.
```

ó

Gaps

;

```
Sequences shown in AAV18100 to AAV18129 represent the nucleotide sequences of the intron-exon junctions of the human hydronephrosis (HNG) gene. A translocation partner to this HNG gene on chromosome 6 is the chromosome 19 USF2 gene. The HNG gene can be used as a starting point to design sultable compounds or techniques for the treatment of renal diseases or disorders, or nucleotide probes for diagnosing cells involved
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hydronephrosis gene - useful to treat or diagnose renal diseases and disorders, e.g. vesical-ureteral reflux, pelvi-ureteral junction obstruction, multicystic renal dysplasia or renal agenesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 3; Fig 10; 73pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-240833/21.
                                    WPI; 1995-100950/14
                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Van De Ven WJM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9815650-A2
05-JUL-1993;
                                                                                                                                                                                                                                                                                                                                           04-SEP-1998
                                                                                                                                                                                                                   12;
                                                                                                                                                                                                                                      832
                                                                                                                                                                                                                                                                                                                         AAV18122;
                                                       An agent
                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                   datches
                                                                                                                                                                                                                                                                                            RESULT
à
                                                                                                                                                                                                                                                     g
```

```
gene can be used as a starting point for preparing suitable antibodies for diagnosing cells involved in renal diseases and disorders. The products and method can be used to treat or diagnose renal diseases and disorders selected from vesical-ureteral reflux, uni or bilateral palviuxeteral junction obstruction, multicystic renal dysplasia (MRD), renal agenesis, renal aplasia, hydronephrosis, Von Mayer-Rokitansky-Kuester
renal diseases or disorders. A protein or a fragment encoded by HNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HPV-16, inhibitor, antisense oligonucleotide; E6/E7 gene; human, keratinocyte, cervical cell; cervical tumour; ss.
                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.4; DB 1; Length 16; 92.3%; Pred. No. 6.9e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                              Seguence 16 BP; 6 A; 1 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (USSH ) US DEPT HEALTH & HUMAN SERVICES.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human papillomavirus type 16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98WO-US018320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97US-00929140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Dipaolo J, Alvarez-Salas L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX33869 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           888 CACTIACTICICA 900
                                                                                                                                                                                                                              disorder and bifid ureter
                                                                                                                                                                                                                                                                                                                                                                                                                               12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13 CACTTACTTCTGA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1999-243727/20.
                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HPV-16 inhibitor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              03-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9913071-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    25-JUN-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX33869;
                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tumors.
                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88888888888888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ö
                                                                                                                                                                                                                                                                                                                                                                                   which is able to form a triple-helix with double-stranded DNA. Specifically, the 17mers are able to form a triplex with SV40 DNA. In the first version of the oligomer (II) there is a phosphorothicate linkage between nucleotides 2 and 3 and in the second version (III) there are two phosphorothicate linkages, one between nucleotides 16 and 17
                                                                                                                                                                                                for the formation of triple-stranded chain DNA - useful for the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Hydronephrosis gene; HNG gene; USF2 gene; renal disease; renal aplasia; vesical-ureteral reflux; pelvi-ureteral junction obstruction; multicystic renal dysplasia; renal agenesis; hydronephrosis; MRD; von Mayer-Rokitansky-Kuester disorder; bifid ureter; ss.
                                                                                                                                                                                                                                                                                                                                    The sequence AAQ83162 represents two preferred versions of an oligomer which is able to form a trinle-helix with Arnhla trinle-helix with Arnha trinle-helix with Arnhla tr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human HNG gene exon 12/intron 12 splice donor site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16 BP; 0 A; 4 C; 0 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (VLAA-) VLAAMS INTERUNIVERSITAIR INST BIOTECHNOG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 11.4; DB 1;
Pred. No. 6.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PMA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                     Claim 3 and Claim 5; Page 2; 8pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Groenen
                                                                   (SOYA-) SOYAKU GIJUTSU KENKYUSHO KK
                                                                                                                                                                                                                                     inhibition of gene expression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97WO-EP005583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96EP-00202820
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fryns JPGJ,
          93JP-00191766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAV18122 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rrrrrcrrcrc 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
```

```
ò
                                                                                                                                                                           This sequence represents an antisense oligonucleotide of the invention. The antisense oligonucleotide analogs (ONS) have a sequence complementary to a sequence of nucleotides 415-445 of human papilloma virus-16 (HPV-16). The antisense ONS can be used to inhibit expression of HPV gene E6/E7 in living cells, preferably human keratinocytes or human cervical cells. They bind to E6/E7 mRNA in the cell, prevent mRNA translation and promote mRNA degradation by intracellular RNASS H. They can be used for preventing transformation of living cells by HPV. The antisense ONs are
New antisense oligonucleotide analogs for inhibiting growth of cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    used particularly for inhibiting the growth of cervical tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 16; 92.3%; Pred. No. 6.9e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 16 BP; 5 A; 3 C; 3 G; 5 T; 0 U; 0 Other;
                                                                                                                 Claim 4; Page 33; 40pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 837 TCTTCTCTGAAGA 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity 92.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     à
```

```
18-APR-2001; 2001WO-DE001509.
                    US5861244-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               14-JAN-2002
                                       19-JAN-1999
                                                                                                                   Hepburn AG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-OCT-2001.
                                                                                                                                                                                     bacteria.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AA168648;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AA168648
  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Op
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                 This sequence represents an antisense oligonucleotide of the invention. The antisense oligonucleotide analogs (ONS) have a sequence complementary to a sequence of nucleotides 415-445 of human papilloma virus-16 (HPV-16). The antisense ONS can be used to inhibit expression of HPV gene E6/E7 in living cells, preferably human keratinocytes or human cervical cells. They bind to E6/E7 mRNA in the cell, prevent mRNA translation and promote mRNA degradation by intracellular RNASE H. They can be used for preventing transformation of living cells by HPV. The antisense ONS are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Triplex formation; DNA detection; triple helix; identification; bacteria;
                                                                                                                                                                                                                                                                                                                     antisense oligonucleotide analogs for inhibiting growth of cervical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Triple helix third strand of dystrophin gene nucleotides 3800-3815.
                                                                                                                         HPV-16; inhibitor; antisense oligonucleotide; E6/E7 gene; human;
keratinocyte; cervical cell; cervical tumour; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                              used particularly for inhibiting the growth of cervical tumours
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ,
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 11.4; DB 1; Length 16;
Pred. No. 6.9e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 16 BP; 5 A; 3 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                              SERVICES
                                                                                                                                                                                                                                                                                                                                                 Claim 6; Page 33; 40pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                            (USSH ) US DEPT HEALTH & HUMAN
                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAX14643 standard; DNA; 16 BP.
                                                                                                                                                    Synthetic.
Human papillomavirus type 16
                                                                                                                                                                                                                                           97US-00929140.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%;
                                                                                                                                                                                                                                                                                 Alvarez-Salas L;
                                             AAX33872 standard; RNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         837 ICTICICIGAAGA 849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-MAR-1999 (first entry)
                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14 TGTTCTCTGAAGA 2
14 TGTTCTCTGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oncogene; virus; ss.
                                                                                                                                                                                                                                                                                                   WPI; 1999-243727/20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                      HPV-16 inhibitor.
                                                                                                                                                                                                                                          05-SEP-1997;
                                                                                                                                                                                                                        03-SEP-1998;
                                                                                    25-JUN-1999
                                                                                                                                                                                  WO9913071-A1
                                                                                                                                                                                                     18-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12;
                                                                                                                                                                                                                                                                                Dipaolo J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                AAX33872;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX14643;
                                                                                                                                                                                                                                                                                                                                tumors
                           RESULT 993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 994
                                                                                                                                                                                                                                                                                                                      New
                                     AAX33872,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX14643
ID AAX1
g
                                                                d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
```

```
The present sequence represents a polynucleotide that is able to form a triple helix with a double stranded sequence. Cytosine bases in the present can be replaced with 5-methylcytosine for increased triplex stability. The present sequence is used in the assay of the invention, where it can be part of the anchor DNA or reporter DNA sequence. The assay comprises adding a sample containing double-stranded DNA test sequences to an aqueous medium containing at least one complex of anchor DNA, attached to a solid support, and reporter DNA, where either a part of the anchor DNA or reporter DNA, where either a part structure with part of the test sequence. Triplex formation results in displacement of the reporter DNA which is detected as an indication of the presence of the DNA test sequence. Triplex formation results in sequences, particularly for identification of bacteria (by detecting genes for ribosomal RNA) in clinical samples, but also detecting of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      intracellular adhesion molecule, dermatological, antiasthmatic, antiinflammatory, immunosuppressive, gastrointestinal, psoriasis, neurodermatitis, allergic asthma, Crohn's disease, autoimmune disease, transplant rejection, psoralen, photo-ultra-violet therapy, ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Assay of genetic sequences based on triplex formation from double stranded analyte - and hybrid of anchor and reporter sequences, with reporter released if triplex formation occurs, used e.g. to identify
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ICAM-1; triple helix; transcription inhibition; antipsoriatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.4; DB 1; Length 16;
Pred. No. 6.9e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ICAM-1 triple helix associated oligonucleotide SEQ ID 50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 16 BP; 0 A; 7 C; 1 G; 8 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Col 15-16; 168pp; English.
                                                                                                                                                                                                                                                                                                                                                                                             (PROF-) PROFILE DIAGNOSTIC SCI INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  oncogenes and Hepatitis B virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAI68648 standard; DNA; 16 BP.
                                                                                                                                                                                                                                        93US-00173489
                                                                                                                                                                                                                                                                                                                  92US-00968436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                894 CTTCTCAGCTTCT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 CTICICIGCTICT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ΰ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-130384/11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO200179487-A2.
Homo sapiens
                                                                                                                                                                                                                                        22-DEC-1993;
                                                                                                                                                                                                                                                                                                                  29-OCT-1992;
```

0;

Besch R;

are

```
(they bind directly to the gene, so a compensatory increase in transcription is not possible). (A) may be coupled to psoralen to provide light-regulatable, sequence-specific downregulation of genes; this should make photo-ultra-violet therapy more specific, with reduced side effects.
                                                                                                                                                                                                                                                                                                                        triple-helix forming oligonucleotides, having at least 3 sequential purine and/or pyrimidine bases, capable of inhibiting transcription of ICAM-1. (A) has a sequence specific for the transcribed or promoter regions of the ICAM-1 (intracellular adhesion molecule) gene. The products of the invention have antipsoriatic, dermatological, antiasthmatic, antiinflammatory, immunosuppressive and gastrointestinal activity. (A) are used for treatment or prevention of ICAM-1-associated diseases, specifically psoriasis, neurodermatitis, allergic asthma, crohn's disease, autoimmune diseases and transplant rejection. Compared with antisense oligonucleotides, (A) provide a longer-lasting effect
                                                                                                                                                                                                                                                                                                            This invention describes novel polydeoxyribonucleotides (A), for use as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ICAM-1; triple helix; transcription inhibition; antipsoriatic; intracellular adhesion molecule; dermatological; antiasthmatic; antihlfammatory; immunosuppressive; gastrointestinal; psoriasis; neurodermatitis; allergic asthma; Crohn's disease; autoimmune disease; transplant rejection; psoralen; photo-ultra-violet therapy; ds.
                                                                                                                                                                                       Triple-helix forming polydeoxyribonucleotides, useful for treating intracellular adhesion molecule-1 related diseases, e.g. psoriasis, directed against transcribed or promoter regions of the ICAM-1 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAI68599-AAI68673 represent oligonucleotides used to illustrate the method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ICAM-1 triple helix associated oligonucleotide SEQ ID 51.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16 BP; 3 A; 8 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                    Claim 5; Page 16; 61pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAI68649 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-APR-2000; 2000DE-01019252.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-APR-2001; 2001WO-DE001509
                  18-APR-2000; 2000DE-01019252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              763 AGGCCTCCACTTC 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         12; Conservative
                                                                                                                                                   WPI; 2002-017614/02.
                                                      (DEGI/) DEGITZ K K. (BESC/) BESCH R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200179487-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-JAN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-OCT-2001.
                                                                                                              Degitz KK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAI68649;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

```
products of the invention have antipocriatic, dermatological, antiasthmatic, antinflammatory, immunosuppressive and gastrointestinal activity. (A) are used for treatment or prevention of ICAM-1-associated diseases, specifically psoriasis, neurodermatitis, allergic asthma, crohn's disease, autoimmune diseases and transplant rejection. Compared with antisense oligonucleotides, (A) provide a longer-lasting effect (they bind directly to the gene, so a compensatory increase in transcription is not possible). (A) may be coupled to psoralen to provide tight-regulatable, sequence-specific downregulation of genes; this should make photo-ultra-violet therapy more specific, with reduced side effects. AA168599-AA168673 represent oligonucleotides used to illustrate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                  This invention describes novel polydeoxyribonucleotides (A), for use as
                                                                                                                                                                                                              triple-helix forming oligonuclectides, having at least 3 sequential purine and/or pyrimidine bases, capable of inhibiting transcription of ICAM-1. (A) has a sequence specific for the transcribed or promoter regions of the ICAM-1 (intracellular adhesion molecule) gene. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                     Triple-helix forming polydeoxyribonucleotides, useful for treating intracellular adhesion molecule-1 related diseases, e.g. psoriasis, directed against transcribed or promoter regions of the ICAM-1 gene.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New nucleic acid encoding human prostate membrane-specific antigen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.4; DB 1; Length 16;
Pred. No. 6.9e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tumour suppression/reversion associated nucleotide #2654.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16 BP; 3 A; 2 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tuijnder
                                                                                                                                                              Claim 5; Page 16; 61pp; German.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-SEP-2002; 2002WO-IB004219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ADB42331 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            763 AGGCCTCCACTTC 775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14 AGGCCTCCCTTC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               method of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telerman A, Amson R,
                 Besch R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-441574/41.
                                                 WPI; 2002-017614/02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO2003040369-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15-MAY-2003
                 Degitz KK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ADB42331;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADB42331,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ö
```

Gaps

.. 0

3.9%; Score 11.4; DB 1; Length 16; 92.3%; Pred. No. 6.9e+02; ive 0; Mismatches 1; Indels

92.3%;

AGGCCTCCCTTC 15

(first entry)

(DEGI/) DEGITZ K K. (BESC/) BESCH R.

0

rangularies of at least 10 cursecuries of these microcuries, a caquence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as expensions. The nucleotides (also vectors containing them and calls containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or call degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and be propertied are nucleotides and polypeptides can be used for diagnosis of the expression of the nucleotides and polypeptides can be used for diagnosis and polypeptides can be used for diagnosis. The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; veruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss. useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies. also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal . 0 Mcswiggen JA; Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels Sequence 17 BP; 3 A; 5 C; 3 G; 6 T; 0 U; 0 Other; Human TIE-2 substrate sequence SEQ ID NO:1689. Coeshott C, Disclosure; Page 342; 771pp; French. Jarvis T, expression of the nucleotides. AAA18463 standard; RNA; 17 BP. 3.9%; 99WO-US006507. 98US-0079678P. (RIBO-) RIBOZYME PHARM INC. 713 CCCAGGAGAGTGA 725 19-JUN-2000 (first entry) Query Match 3.9 Best Local Similarity 92.3 Matches 12; Conservative CTCAGGAGAGTGA 3 Pavco PA, Roberts E, WPI; 1999-591315/50. Homo sapiens WO9950403-A2 24-MAR-1999; 27-MAR-1998; 07-OCT-1999. AAA18463; 15 RESULT 998 AAA18463 à a

. 0

Gaps

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl content an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA17167 and AAA17168 to AAA1768 to AAA1768 to AAA196775 to AAA19154 represent their represent their corresponding target sequences; AAA19154 to AAA19155 to AAA19150 and AAA19150 and AAA21050 and AAA21050 and AAA21050 and AAA21050 to AAA21501 to AAA21595 represent ribozyme sequences; AAA19223 to AAA21635 and AAA21635 and AAA21635 and AAA21635 to AAA21635 represent their corresponding target sequences; AAA21685 to AAA21635 and AAA21635 and AAA21635 to AAA21635 to AAA21635 represent their corresponding target sequences; AAA21635 to AAA21635 to AAA21635 and AAA21635 and AAA21635 and AAA21635 and AAA21635 and AAA21635 and AAA23343 to Corresponding target sequences; cor 0; Novel ribozymes for modulating the synthesis, expression and/or stability Probe, quantification, human, GTP binding protein, G protein, alpha subunit; specific mRNA; detection; hybridisation; diagnosis; pathophysiology; disease state; hereditary; cancer; infectious; osteodystrophy; pituitary tumour, acromegaly; melanoma cells; diabetes; PCR; polymerase chain reaction; ss. Gaps .. 0 Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels integrin subunit alpha-6, or integrin subunit beta-3 Human C HUMJUNA/HUMD965 human jun-D specific probe. Sequence 17 BP; 4 A; 2 C; 9 G; 0 T; 2 U; 0 Other; 0; Mismatches of an mRNA encoding an angiogenic factors. AAQ47614 standard; cDNA to mRNA; 17 BP. Claim 56; Page 96; 305pp; English. 92US-00857208. 92US-00857059. 92US-00974409. 93WO-US000977. 92.3%; 3.9%; 804 TCTCCTCCAACTC 816 (first entry) 12; Conservative 17 rerecresasere s (revised) Best Local Similarity WO9315221-A1 29-JAN-1993; 29-JAN-1992; 24-MAR-1992; 12-NOV-1992; 25-MAR-2003 26-JAN-1994 05-AUG-1993 AAQ47614; Synthetic Query Match RESULT 999 Matches AAQ47614 δ 셤

CHEM CO LTD. CHEM RES CENT INC.

(HITB ) HITACHI (HITB ) HITACHI

Cooper A, Mitsuhashi M;

```
WPI; 1993-258695/32
```

The sequences given in AAQ47613-20 show regions of homology between jun sequences and the human jun-D specific probe HVMD965 which may be of use as jun-D specific probes. They were used in the method of the invention for the detection and quantification of mRNAs in a sample without the need to purify the mRNA from cells. The claimed method comprises identifying an ollygomer complementary to this sequence to an insoluble support. The sample is then incubated with the insoluble support and that the unique sequence will hybridise to the bound oligomer and be immobilised. Non-immobilised components are washed from the support and bound RNA is labelled in such a way that the label is incorporated onto the support relative to the amount of much and can be used for the reliable, signification of multiple varieties of mRNA. It may be used for diagnosing and recognition of pathophysiciology of various disease states, eg, hereditary diseases, cancer, and infectious diseases. A genetic deficiency of Gs protein is the molecular basis of hereditary osteodystrophy. Pituitary tumours in acromegalic parients have been shown to contain mutant Gs proteins. G proteins are also involved in invasive and metastatic melanoma cells, and diabetes. See also AAQ47381-666. (Updated on 25-WAR-2003 to correct PN field.) Quantitating messenger RNA in sample - using immobilised-polynucleotide having sequence complementary to sequence unique to the MRNA. Example 9; Page 73; 177pp; English.

Gaps .; 0 Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 1; Indels Sequence 17 BP; 4 A; 5 C; 6 G; 2 T; 0 U; 0 Other; 0; Mismatches 3.9%; 12; Conservative Query Match Best Local Similarity Matches

ò

710 AGTCCCAGGAGAG 722 1 AGTCCCAGGAGCG 13 à d

AAQ47619 standard; cDNA to mRNA; 17 BP. (first entry) (revised) 25-MAR-2003 26-JAN-1994 AAQ47619; 

Chicken C CHKJUN, quail C QULJUN/HUMD965 jun-D probe.

Probe; quantification; human; GTP binding protein; G protein; alpha subunit; specific mRNA; detection; hybridisation; diagnosis; pathophysiology; disease state; hereditary; cancer; infectious; osteodystrophy; pituitary tumour; acromegaly; melanoma cells; diabetes; PCR; polymerase chain reaction; specific; ss.

Synthetic.

WO9315221-A1 05-AUG-1993. 93WO-US000977. 29-JAN-1993;

92US-00827208. 92US-00857059. 92US-00974409. 29-JAN-1992; 24-MAR-1992 12-NOV-1992

(HITB ) HITACHI CHEM CO LTD. (HITB ) HITACHI CHEM RES CENT INC. Akitaya T, Cooper A, 

Mitsuhashi M;

Quantitating messenger RNA in sample - using immobilised-polynucleotide having sequence complementary to sequence unique to the MRNA.

Example 9; Page 73; 177pp; English

The sequences given in AAQ47613-20 show regions of homology between jun sequences and the human jun-D specific probe HUMD965 which may be of use as jun-D specific probes. They were used in the method of the invention for the detection and quantification of mRNAs in a sample without the need to purify the mRNA from cells. The claimed method comprises identifying a polymuoleotide sequence unique to the mRNA, and immobilishing an oligomer complementary to this sequence to an insoluble support. The sample is then incubated with the insoluble support such that the unique sequence will hybridise to the bound oligomer and be immobilised. Non-immobilised components are washed from the support and bound RNA is labelled in such a way that the label is incorporated onto the support relative to the amount of mRNA on the support. The amount of bound label is then determined. This method can be used for the reliable, rapid, simultaneous quantification of multiple varieties of mRNA. It may be used for diagnosting and recognition of pathophysiciolay of various may be used for diagnosting and recognition of pathophysicions. disease states, eg. hereditary diseases, cancer, and infectious diseases. Of proteins are thought to be involved in causing various disease states. A genetic deficiency of Gs protein is the molecular basis of hereditary osteodystrophy. Pituitary tumours in acromegalic patients have been shown to contain mutant Gs proteins. G proteins are also involved in invasive and metastatic melanoma cells, and diabetes. See also AAQ47381-666. (Updated on 25-MAR-2003 to correct PN field.)

Seguence 17 BP; 6 A; 3 C; 6 G; 2 T; 0 U; 0 Other;

Gaps ; Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative

0

710 AGTCCCAGGAGAG 722 1 AGTCGCAGGAGAG 13 ð

AAQ45735 standard; DNA; 17 (first entry) (revised) 25-MAR-2003 26-NOV-1993 AAQ45735; RESULT 1001 AAQ45735, 

BP.

Beta-APP codon 717-targeted antisense oligonucleotide #5.

Beta Amyloid Precursor Protein; Alzheimer's Disease; missense mutation; antisense oligonucleotide; senile dementia; ss.

Synthetic

Key

Location/Qualifiers

/*tag= a /*tag= a /*tag= a prosphodiester linkages is pret= substituted by a sulphur-contg. linkage and at least one of the bases is pref. modified at the 2' postion" misc_feature

WO9313114-A1

08-JUL-1993

```
Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9715662-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     26-0CT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  01-MAY-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                        AAX69318;
                                                                                                                                                                                                                                                                                                                                                                       RESULT 1003
                                                                                                                                                                                                                                                                                                                                                                                    AAX69318
  g
                                                                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                   This oligonucleotide is one of a series of antisense oligonucleotides targeted to codon 717 of the mutant beta-APP gene in which a G to A mutation results in a Val (GTC) to 11e (ATC) mutation. The antisense oligonucleotide can be used to detect mutant beta-APP and to modulate beta-APP expression and so treat conditions arising from overproduction of beta-amyloid. In the antisense oligonucleotides of the invention, at least some of the phosphodiester bonds are pref. substituted with sulphur containing (esp. phosphoro- thioate) bonds and at least one of the bases is pref. modified at the 2' position, e.g. 2'-O-methylated. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Vascular endothelial growth factor receptor; VBGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                           Oligo-nucleotide hybridising using the beta-amyloid precursor protein for diagnosing familial Alzheimer's disease, detecting mutant Beta-APP
                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                        .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #500.
                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                       1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stinchcomb D, Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 4 A; 2 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                             Claim 14; Page 35; 45pp; English.
                                                                                           Ecker DJ:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX74972 standard; RNA; 17 BP.
             92WO-US010785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96WO-US017480,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95US-0005974P
                                    91US-00814963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96US-00584040
                                                                                                                                                                                                                                                                                                                                                                                                                                               914 GATTATCATCACC 926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                       12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13 GATCATCATCACC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mcswiggen J,
                                                                PHARM INC
                                                                                          Monia BP, Freier SM,
                                                                                                                  WPI; 1993-227257/28.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CHIR ) CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1997-259017/23
                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                SISI (-SISI)
            16-DEC-1992;
                                    24-DEC-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-MAY-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX74972;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus sp
                                                                                                                                                                                                                                                                                                                                                                                                          Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAX74972
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

```
·;
                                                                                                                               The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour ragiogenesis, coular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAXX0.275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VBGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (flt-1), kinase insert domain containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fins-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                          stability – useful for treating e.g. tumour angiogenesis, psoriasis,
rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.4; DB 1; Length 17;
Pred. No. 7.4e+02;
4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human flt1 VEGF receptor hammerhead ribozyme substrate #613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stinchcomb D, Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 3 A; 7 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                       Claim 4; Page 170; 218pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 4; Page 65; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          96WO-US017480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95US-0005974P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96US-00584040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX69318 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        838 CTTCTCTGAAGAC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 61.5-
First 8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |::|:|:|| |||
4 CUUCUCUGAGGAC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pavco P, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (CHIR ) CHIRON CORP.
```

826 TGTGTCTCTTTC 838

8 6

4 UGUGUCUCUUUGC 16

```
;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (fll-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAXG755 to AAX7572 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
               angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAA67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; MSDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes nucleic acid molecules which modulate the
                                                                                                                                                                                   Gaps
(KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour
                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #100.
                                                                                                                                         Score 11.4; DB 1; Length 17;
Pred. No. 7.4e+02;
4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Escopedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 2 A; 4 C; 4 G; 0 T; 7 U; 0 Other;
                                                                                                          Sequence 17 BP; 2 A; 5 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4; Page 125; 218pp; English
                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                               3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96WO-US017480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         95US-0005974P.
                                                                                                                                                                                                                                                                                                                                                   AAX72667 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC.
(CHIR ) CHIRON CORP.
                                                                                                                                                                                                                       838 CTTCTCTGAAGAC 850
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        fms-like tyrosine kinase 1
foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                          28-JUL-1999 (first entry)
                                                                                                                                                                                                                                            |::|:|| || || 4 CUUCUCUGAGGAC 16
                                                                                                                                                                                     8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pavco P, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-259017/23.
                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    01-MAY-1997.
                                                                                                                                                                                                                                                                                                                                                                                        AAX72667;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus sp.
                                                                                                                                                                                                                                                                                                                 RESULT 1004
                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                     88888888
                                                                                                                                                                                                                       à
```

```
The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (fit-1), kinase insert domain containing angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ô
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                   Vascular endothelial growth factor receptor; VEGF receptor; [It-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; KDR, tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                       Mouse flk-1 VEGF receptor hammerhead ribozyme substrate #101.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.4; DB 1; Length 17; 38.5%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Escopedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 1 A; 4 C; 4 G; 0 T; 8 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 4; Page 125; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                             AAX72668 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                         95US-0005974P.
                                                                                                                                                                                                                                                                                                                                            96WO-US017480.
                                                                                                                                                                                                                                                                                                                                                                                                                        PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAV97556 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            826 TGTGTCTTTTC 838
                                                                                                                                                                                                                    foetal liver kinase 1; ss.
                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pavco P, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                        CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1997-259017/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME
                                                                                                                                                                                                                                                                              WO9715662-A2
                                                                                                                                                                                                                                                                                                                                            25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                         26-OCT-1995;
11-JAN-1996;
                                                                                          28-JUL-1999
                                                                                                                                                                                                                                                                                                             01-MAY-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV97556;
                                                           AAX72668;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                       CHIR )
                                                                                                                                                                                                                                                    Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1006
AAV97556
RESULT 1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
            ò
```

.; 0

Gaps

. 0

Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 38.5%; Pred. No. 7.4e+02; Matches 5; Conservative 7; Mismatches 1; Indels

```
06-AUG-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA19029
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                       Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                           which specifically cleave RNA derived from an epidermal growth factor receptor (BGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090 represent specifically claimed target sequence from human BGF-R. AAV98044 to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and hairpin ribozymes respectively for human BGF-R. The NAMs are useful for cleaving EGF-R RNA in the treatment of a condition associated with EGFR treatment of cancers. The NAMs can also be used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of EGF-R RNA in a cell
                                                                                                                                                                                                                                                                                      Enzymatic nucleic acids - which cleave RNA derived from an epidermal growth factor receptor, useful for inhibiting cell proliferation and for
                                                                                                                                                                                                                                                                                                                                                     The present invention describes enzymatic nucleic acid molecules (NAMS)
                                                  Human, epidermal growth factor receptor; EGFR; EGF-R; target sequence; hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation; cancer; genetic drift; detection; mutation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human, epidermal growth factor receptor; EGFR, EGF-R, target sequence; hammerhead ribozyme, hairpin ribozyme; inhibition; cell proliferation; cancer; genetic drift; detection; mutation; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 1; Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human EGF-R target sequence nucleotide position 1229.
                              Human EGF-R target sequence nucleotide position 2955
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1; 9.2%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Mismatches
                                                                                                                                                                                                                                             Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                               Claim 5; Page 75; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAV97354 standard; RNA; 17 BP
                                                                                                                                                                                         97US-00985162.
                                                                                                                                                          98WO-US000730.
                                                                                                                                                                               97US-0036476P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69.28;
                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              800 GAGCTCTCCTCCA 812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
          17-MAR-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4 GAGAUCUCCUCCA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9; Conservative
                                                                                                                                                                                                                                                                  WPI; 1998-437449/37
                                                                                                                                                                                                                                            Fell P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                         UNIV ASTON
                                                                                                                                                                                                                                                                                                           treating cancers.
                                                                                                                WO9833893-A2
                                                                                                                                                         14-JAN-1998;
                                                                                                                                                                               31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO9833893-A2
                                                                                            Homo sapiens
                                                                                                                                                                                         04-DEC-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-MAR-1999
                                                                                                                                     06-AUG-1998
                                                                                                                                                                                                                                            Akhtar S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV97354;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                         (UYAS-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAV97354/
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Op
```

```
The present invention describes enzymatic nucleic acid molecules (NAMs) which specifically cleave RNA derived from an epidermal growth factor receptor (EGF-N) gene. AAV9721 to AAV98043 and AAV98999 to AAV98090 to represent specifically claimed target sequence from human EGF-R. AAV98044 to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and hairpin ribozymes respectively for human BGF-R. The NAMs are useful for cleaving EGF-R RNA in the treatment of a condition associated with EGFR expression levels e.g. to inhibit cell proliferation in the prevention or treatment of cancers. The NAMs can also be used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of EGF-R RNA in a cell
                                                                                                                                                                                                                                                                                                                                                                                                           Enzymatic nucleic acids - which cleave RNA derived from an epidermal growth factor receptor, useful for inhibiting cell proliferation and for treating cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; harmerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiathritic; antipsoriatic; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; vertuca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 6 A; 6 C; 1 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human TIE-2 substrate sequence SEQ ID NO:2255.
                                                                                                                                                                                                                                                                             Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 5; Page 70; 109pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA19029 standard; RNA; 17 BP.
98WO-US000730
                                                                97US-0036476P.
97US-00985162.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98US-0079678P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99WO-US006507
                                                                                                                                                                     (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 717 GGAGAGTGACTCT 729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 92.3
Warches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 GGAGAGTGAGTCT
                                                                                                                                                                                                                                                                                                                                          WPI; 1998-437449/37
                                                                                                                                                                                                                                                                          Fell P,
                                                                                                                                                                                                         UYAS-) UNIV ASTON
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9950403-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-MAR-1999;
14-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                    31-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19-JUN-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         07-OCT-1999.
                                                                                                                                                                                                                                                                          Akhtar S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA19029;
```

0

ŗ, Bellon L; Burgin A;

Kisich K,

97US-0049002P. 97US-0056808P. 97US-0061321P. 97US-0061324P. 97US-0064866P.

97US-0068212P

```
Human, c-raf, A-raf, B-raf, hammerhead ribozyme, hairpin ribozyme,
target, substrate, catalyst, modulation, expression, Raf gene, delivery,
screening, identification, synthesis, deprotection, purification, cancer,
inflammation, psoriagis, non-hepatic ascites, infection, genetic drift,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human C-raf target site nucleotide position 2508.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               restenosis; rheumatoid arthritis; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV91322 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18-FEB-1999 (first entry)
                                                                                                                                                           WPI; 1999-591315/50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                           Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV91322;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1009
AAV91322/C
XX
AC AAV91322
XX
DT 18-FEB-1
XX
XX
KW Human, (
KW target, (
KW target, (
KW inflammin, (
KW inflammin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
```

```
Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.
                                                                                                                                                                                                                                                            Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Parry T, Sweedler D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 177; Page 152; 259pp; English.
                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1999-009494/01.
                                                                                                   02-OCT-1997;
02-OCT-1997;
                                                                               22-AUG-1997;
                                                                                                                                                                                        19-DEC-1997;
                      1997-NUL-60
                                                     03-JUL-1997
                                                                                                                                                           05-NOV-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon muclear transporter (ARNY) gene, an integrin alpha 6 subunit gene, or a The-2 gene. AAA17675 to AAA1767 and AAA17661 to AAA17623 to AAA1888 represent their corresponding target sequences; AAA1968 to AAA19184 represent their corresponding target sequences; and AAA19155 to AAA19152 represent their corresponding target sequences; cc AAA19153 to AAA19152 represent their corresponding target sequences; and AAA19156 to AAA19150 and AAA19150 to AAA19150 and AAA19150 to AAA19150 and AAA21601 to AAA2159 represent ribozyme sequences; cc AAA1953 to AAA2169 to AAA21601 and AAA21501 to AAA2150 represent ribozyme sequences; cc AAA2169 to AAA21601 and AAA21501 to AAA21342 represent their corresponding target sequences; cc AAA2169 to AAA2169 encoding target sequences; cf integrin subunit beta 3, and AAA2342 represent ribozyme sequence for integrin subunit beta 3, integrin subunit alpha 6, or Tie-2. They are stability of an mRNA encoding angiogenic factor, especially was to treat cancer, diabetic retinopathy, age related concern subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related concern diabetic retinopathy, age related concern diabetic retinopathy, age related angiolismome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes end diseases related to the levels of ARNI, Tie-2, integrin conversion 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                          ribozymes for modulating the synthesis, expression and/or stability
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                         Mcswiggen JA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 11.4; DB 1; Length 17;
Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 0 A; 4 C; 2 G; 0 T; 11 U; 0 Other;
                                                                      Coeshott C,
                                                                                                                                                                          Novel ribozymes for modulating the synthess of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9; Mismatches
                                                                                                                                                                                                                                                         Claim 56; Page 132; 305pp; English.
                                                                      Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Y Match 3.9%;
Local Similarity 23.1%;
nes 3; Conservative
        (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 UCUUUUCUUUUCU 13
                                                                 Roberts E,
```

```
capable of modulating a process in a biological system. In method comprises:

capable of modulating a process in a biological system. The method comprises:

comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (b) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with endounclease activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to cleave target nucleic acid, particularly for treating systemic diseases caused by specific acid, particularly for treating systemic diseases.

Cleave target nucleic acid, particularly for treating systemic diseases caused by specific acid, and to determine or -raf RNA. Specifically NACs ascites and infection. They may also be used to detect genetic drift and mutations in diseased calls and to determine or -raf RNA. Specifically NACs with RNA-cleaving activity that modulate expression of the Raf gene, are used to treat cancer, restenosis, posniasis or rheumatoid arthritis, or used to treat concer, restenosis, posniasis or rheumatoid arthritis, or of sugar/phosphate modifications increases steability against nuclease and activity. AAV99922 to AAV99317 represent NACs that can be used in the modulating the expression of a Raf gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human, c-raf, A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme; target; substrate; catalyst; modulation; expression; Raf gene; delivery; screening; identification; synthesis; deprotection; purification; cancer; inflammation; psoriasis; non-hepatic ascites; infection; genetic drift; restenosis; rheumatoid arthritis; ss.
method has been developed for the identification of a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 4 A; 3 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human C-raf target site nucleotide position 2511.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV91324 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840 TCTCTGAAGACAG 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
Matches 12, Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAV91324;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV91324/VID AAV9
XX
AC AAV9
XX
DT 18-F
XX
DE Huma
XX
KW Huma
KW Earg
KW SCRE

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
```

BP.

Homo sapiens

98WO-US009249.

05-MAY-1998;

WO9850530-A2 12-NOV-1998.

```
Action of a nucleic acid capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method capable of modulating a the process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (b) identifying NAC a random sequence, and a catalytic domain (CD); and (b) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with cendomuclease activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to cleave target nucleic acid, particularly for treating systemic diseases caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic ascites and infection. They may also be used to detect genetic drift and ascites and infection. They may also be used to detect genetic drift and custom in the RNA-cleaving activity that modulate expression of the RAF gene, are used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of craft. Introduction of sugar/phosphate modifications in discreases stability against nuclease and activity. ARV90222 to AAV93877 represent NACs that can be used in the modulating the expression of a RAF gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, c-raf, A-raf, B-iaf, hammerhead ribozyme, hairpin ribozyme;
target, substrate, catalyst, modulation; expression; Raf gene; delivery;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.
                                                                                                                                                                                                                                                                                                                                            Bellon L;
                                                                                                                                                                                                                                                                                                                                                                  Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                            Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K,
Parry T, Beigelman L, Mcswiggen JA, Karpeisky A,
Thompson J, Workman CT, Beaudry A, Sweedler D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human C-raf target site nucleotide position 2172.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 177; Page 152; 259pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAV91266 standard; RNA; 17 BP.
                                                                                                                                     970S-0049002P.
970S-0051718P.
970S-0056808P.
970S-0061321P.
970S-0061324P.
                                                                             98WO-US009249
                                                                                                                                                                                                                                                                   97US-0068212P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840 TCTCTGAAGACAG 852
                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTCTGAAGAAAG 2
                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1999-009494/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18-FEB-1999
                                                                                                                                                                                                     02-OCT-1997;
02-OCT-1997;
05-NOV-1997;
WO9850530-A2
                                                                                 05-MAY-1998;
                                                                                                                        09-MAY-1997;
09-JUN-1997;
                                                                                                                                                                                                                                                                      19-DEC-1997;
                                        12-NOV-1998
                                                                                                                                                              03-JUL-1997
                                                                                                                                                                                  22-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV91266;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV91266/
ID AAV9
g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ò
```

```
Amethod has been developed for the identification of a nucleic acid capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic comprising a caid catalysts (NAC) having a substrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (b) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with cendonuclease activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to are used by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepstic ascites and infection. They may also be used to detect genetic drift and ascites and infection. They may also be used to detect genetic drift and with RNA-cleaving activity that modulate expression of the Raf gene, are used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of c-raf. Introduction of sugar/phosphate modifications in discreases stability against nuclease and activity. Anvy0922 to AAV93877 represent NACs that can be used in the method, specifically for modulating the expression of a Raf gene
screening; identification; synthesis; deprotection; purification; cancer; inflammation; psoriasis; non-hepatic ascites; infection; genetic drift; restenosis; rheumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Bellon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kisich K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matulic-Adamic J, Reynolds M, Kisich K,
Beigelman L, Mcswiggen JA, Karpelsky A,
... Sweedler D;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 6 A; 3 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Beigelman L, Mcswiggen JA,
J, Workman CT, Beaudry A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 177; Page 151; 259pp; English.
                                                                                                                                                                                                                                                 97US-0046059P.
97US-0049002P.
97US-0051718P.
97US-0056808P.
97US-0061321P.
                                                                                                                                                                                                                                                                                                                                                   97US-0061324P
97US-0064866P
                                                                                                                                                                                                                98WO-US009249
                                                                                                                                                                                                                                                                                                                                                                                          97US-0068212P
                                                                                                                                                                                                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 1999-009494/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jarvis T, Ma
Parry T, Bei
Thompson J,
                                                                                                Homo sapiens.
                                                                                                                                   WO9850530-A2
                                                                                                                                                                                                                05-MAY-1998;
                                                                                                                                                                                                                                                                          09-JUN-1997
                                                                                                                                                                                                                                                                                                                   22-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                            19-DEC-1997;
                                                                                                                                                                           12-NOV-1998.
                                                                                                                                                                                                                                                                                                                                                       02-OCT-1997
                                                                                                                                                                                                                                                                                                                                     02-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                          05-NOV-1997
```

·

Gaps

0;

3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.48+02; rive 0; Mismatches 1; Indels

839 TTCTCTGAAGACA 851

ò 셤

TICICICAMANCA 5

17

Local Similarity 92.3 nes 12; Conservative

Best Loca Matches

Query Match

; 0

Gaps ·. BP.

AAV91323 standard; RNA; 17

RESULT 1012

AAV91323;

AAV91323/ ID AAV9 XX AC AAV9

```
(RIBO-) RIBOZYME PHARM INC.
                                                                              WPI; 1999-009494/01.
                        Homo sapiens
                            WO9850530-A2
                                      05-MAY-1998;
                                                           19-DEC-1997;
                                 12-NOV-1998.
                                          09-MAY-1997
                                             09-JUL-1997
                                                    02-OCT-1997;
                                                         05-NOV-1997
                                                  22-AUG-1997
                                                                                                                                                        Query Match
```

encoding an abnormally expressed beta-APP, and where at least one of the linkages between the nucleotides is a phosphorothicate linkage, a 2'-0-alkyl moiety, or a 2'-0-methyl moiety. The oligonucleotides are used as nucleic acid hybridisation probes for diaposis of diseases associated with abnormal beta-APP expression, e.g. Alzheimer's disease, or as antisense molecules for inhibiting abnormal beta-APP expression, e.g. for AAV63348-51 represent phosphorothioate antisense oligonucleotides directed against the beta-amyloid precursor protein (APP) mRNA codon 717, when it contains a G to A mutation. The specification describes oligonucleotides which specifically hybridise to beta-APP gene sequences Oligo:nucleotide(s) specific for abnormal beta-amyloid precursor protein gene - useful for detection or anti:sense inhibition of the protein, and thus diagnosis and treatment of Alzheimer's disease. Antisense oligonucleotide directed against beta-APP mutated codon 717 Phosphorothioate, antisense oligonucleotide, beta-amyloid precursor protein, beta-APP, Alzheimer's disease, Nucleic acid transporter system ligand containing template #2. 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; a "phosphorothioate linkaqes" Sequence 17 BP; 4 A; 2 C; 6 G; 5 T; 0 U; 0 Other; Pred. No. 7.46 0; Mismatches Location/Qualifiers Monia BP, Freier SM; Claim 1; Col 16; 24pp; English. BP. BP. 91US-00814963. 94US-00331389 92.3%; AAV63349 standard; DNA; 17 AAA36637 standard; DNA; 17 914 GATTATCATCACC 926 (first entry) (first entry) Local Similarity 92.3 nes 12; Conservative 13 GATCATCATCACC 1 1. .17 /*tag= /note= " (ISIS-) ISIS PHARM INC. treating such diseases WPI; 1999-023437/02 modified base 28-OCT-1994; 24-DEC-1991; 31-JUL-2000 25-JAN-1999 US5837449-A 17-NOV-1998 Synthetic. Ecker DJ, AAV63349 AAA36637; Query Match RESULT 1013 RESULT 1014 Best Loca Matches AAV63349, Key **AAA**36637 qq à Amethod has been developed for the identification of a nucleic acid capable of modulating a process in a biological system. The method capable of modulating a process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (D) identifying NAC a random sequence, and a catalytic domain (CD); and (D) identifying NAC at least part of the SBDs in such systems. Nucleic acid molecules with choosing a part of the SBDs in such systems. Nucleic acid molecules with care used to modulate gene expression in plant and mammanian cells and to cleave target nucleic acid, particularly for treating systemic diseases caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic mattions and infection. They may also be used to detect genetic difft and mutations in diseased cells and to determine c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate expression of the Raf gene, are used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of c-raf. Introduction of sugar/phosphate modifications increases stability against nuclease and activity. ANA99221 to ANA93A77 represent NACS that can be used in the ö Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
target; substrate; catalyst; modulation; expression; Raf gene; delivery;
screening; identification; synthesis; deprotection; purification; cancer;
inflammation; psoriasis; non-thepatic ascites; infection; genetic drift;
restenosis; rheumatoid arthritis; ss. Identifying new catalytic nucleic acid that modulates selected processes especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons. Gaps method, specifically for modulating the expression of a Raf gene Bellon L; ·, Burgin A; Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Thompson J, Workman CT, Beaudry A, Sweedler D; Sequence 17 BP; 4 A; 3 C; 4 G; 0 T; 6 U; 0 Other; Human C-raf target site nucleotide position 2510 Claim 177; Page 152; 259pp; English. 97US-0049002P. 97US-0051718P. 97US-0056808P. 97US-0061321P. 97US-0061324P. 98WO-US009249 97US-0046059P 97US-0064866P 97US-0068212P 3.9%; 92.3%; 840 TCTCTGAAGACAG 852 (first entry) Local Similarity 92.3 hes 12; Conservative 15 TCTCTGAAGAAG 3

ö

Gaps

; 0

Indels

Best Loca Matches

ð 엄

```
The present invention relates to a transporter system for delivering nucleic acid to a cell. The system comprises a nucleic acid binding complex, consisting of a binding molecule bonded non-covalently to the nucleic acid, and covalently to a surface ligand, and a lytic agent. The binding molecule is spermine or a spermidine derivative. Nucleotide construction of the transporter system of the invention. The transporter system is used in gene therapy, particularly to deliver transporter system is used in gene therapy, particularly to deliver transporter systems are also used to create transgenic animals (as models for human carting cardis or disease, cancer, and infection. The transporter systems are also used to create transgenic animals (as models for human carting calls to produce proteins, or transfecting calls in vitro to study the function of the nucleic acid. The use of a surface ligand calls was specific targeting of selected calls and tissues. The lytic agent provides for release of the nucleic acid into the cellular interior, from consumers, without requiring endosomal or lysosomal degradation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                             System for transporting nucleic acid into cells, useful e.g. in gene therapy and for generating transgenic animals, comprises binding agent linked to nucleic acid, surface ligand and lytic agent.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nucleic acid transport system; NTS; cell surface receptor; cytosis; nuclear membrane; lysis moiety; transgenic animal; human disease; nucleic acid delivery; cancer; ss.
Transporter system; nucleic acid delivery; gene therapy; cancer; carcinogenesis; cardiovascular disease; infection; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
                                                                                                                                                                                                                                                                                         Sparrow J, Cristiano RJ, Woo SLC, Smith LC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 17 BP; 0 A; 5 C; 0 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Template pyrimidine series sequence in a ligand.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 15a; 108pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                     (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                92US-00855389.
93WO-US002725.
                                                                                                                                                              93US-00167641.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.9%; Jocal Similarity 92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ39487 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 rrrrrrrrrrrrrr 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12; Conservative
                                                                                                                                                                                                                                                                                                                           WPI; 2000-281993/24.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Key
modified base
                                                                                                                                                                                                                                                                                           Gottchalk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 07-MAR-2000
                                                                                                                                                              14-DEC-1993;
                                                                                                                                                                                                    20-MAR-1992;
                                                                                                                                                                                                                     19-MAR-1993;
                                                                                          US6033884-A.
                                                                                                                              07-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                        Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAZ39487;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Jatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAZ3948.
   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Dp
```

```
The invention relates to a nucleic acid transport system (NTS) for delivering nucleic acid into a cell. The NTS contains but is not limited to 5 components: (a) the nucleic acid or a macromolecule to be delivered; (b) a moiety that recognizes and binds to a cell surface receptor or antigen or is capable of entering a cell through cytosis; (c) a nucleic acid or macromolecular molecule binding moiety; (d) a moiety that is capable of moving or initiating movement through a nuclear membrane; and/or (e) a lysis moiety that enables the transport of the entire complex from the cell surface directly into the cytoplasm of the cell. The NTS correctly into the cytoplasm of the cell. The NTS correctly into the cytoplasm of the cell. The NTS correctly into the cytoplasm of the cell. The NTS capables the transport of the entire complex of specific cells. The NTS can be used to transport of transgenic animals for assessing human disease, such as cancer, in an animal model. The NTS can be used in vitro with tissue culture cells. The NTS can be used in vitro with tissue culture cells. The NTS can be used in vitro with tissue culture cells. The NTS can agent within the NTS avoids the problem of endosomal/lysosomal
                                                                                                                                                                                                                                                                                                                                                             Nucleic acid transport system, useful for creating transgenic animals for assessing human disease such as cancer in an animal model.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead ribozyme; hairpin ribozyme; antisense oligonucleotide; gene expression modification; cancer; phosphorothioate; endonuclease; anticancer; breast cancer; endometrium cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                    Smith LC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels
    /*tag= a
/note= "all C's are methylcytosines"
                                                                                                                                                                                                                                                                                    Gottchalk S, Sparrow J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 0 A; 5 C; 0 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Fig 15A; 107pp; English.
                                                                                                                                                                                                                                                  (BAYU ) BAYLOR COLLEGE MEDICINE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAA25281 standard; DNA; 17 BP.
                                                                                                                                  95US-00460890
                                                                                                                                                                      92US-00855389.
                                                                                                                                                                                          93WO-US002725.
93US-00167641.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 Tritricitor 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12; Conservative
                                                                                                                                                                                                                                                                                      Woo SLC, Cristiano RJ,
                                                                                                                                                                                                                                                                                                                          WPI; 2000-038262/03.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9954459-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19-JUL-2000
                                                                                                                                    03-JUN-1995;
                                                                                                                                                                        20-MAR-1992;
                                                                                                                                                                                            19-MAR-1993;
                                                                                                                                                                                                            14-DEC-1993;
                                                          US5994109-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA25281;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA25281
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  셤
```

. 0

```
Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                               AAC8285'
  ð
                                                                                                                                                                                                                                                                                                                                                              d
                                                                                                                                                                                                                         The present invention describes nucleic acids (A) that interact stably with a target sequence and contain at least one phosphoro(di)thioate with a target sequence and contain at least one phosphoro(di)thioate with a target sequence activity. (A), and more generally any catalytic nucleic acid (A') that modulates expression of the oestrogen receptor.

C nucleic acid (A') that modulates expression of the coestrogen receptor.

C on the conditions associated with levels of oestrogen receptor.

C for other conditions associated with levels of oestrogen receptor.

C secuse of the high selectivity for targeted RNA, (A) can also be used to correlate inhibition of gene expression with alterations in phenotype, particularly for identification of therapeutic targets, and as research reagents (for RNA, in the same way that restriction endonucleases are used with DNA). The combination of therapeutic targets, and as research resistance to nucleases, binding affinity and/or activity. AAA23503 to AAA24747 represent oestrogen receptor hammerhead ribozyme sequences.

CC AAA24747 represent oestrogen receptor hammerhead ribozyme sequences.

CC AAA2593 to AAA25020 represent their corresponding target sequences.

CS AAA25019 to AAA26219 represent their corresponding target sequences and sequences. and seasons used in the exemplification of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .
0
                                                                                                                                                                        nucleic acids that interact, and optionally cleave, target sequences,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                       Bellon L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ribozyme; erythropoietin; granulocyte colony stimulating factor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels
                                                                                                     Karpeisky A,
Haeberli P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 2 A; 9 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                     Mcswiggen JA,
is I, Woolf I,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hammerhead ribozyme substrate #3419.
                                                                                                                                                                                                         Claim 77; Page 74; 148pp; English.
                                                                                                    Beigelman L, Mcswi
Zwick M, Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                       99WO-US008547
                                            98US-0082404P
                                                       98US-00103636
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  11-APR-2000; 2000WO-US009721.
                                                                             (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 92.30,
Best Local 2; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAF07162 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCTCCACTTCTG 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16-FEB-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCTCCACTCTG 17
                                                                                                                                                                                    used to treat cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        interferon alpha; ss.
                                                                                                                                                 WPI; 2000-013248/01.
                                                                                                    Thompson JD, Beig
Reynolds M, Zwick
Matulic-Adamic J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO200061729-A2
                    19-APR-1999;
                                            20-APR-1998;
                                                         23-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
28-OCT-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           19-OCT-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAF07162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1017
                                                                                                                                                                         New
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ਨੇ
```

```
0
                                                                                                                                                                                                                                                                                                                                                       The present invention relates to enzymatic and antisense nucleic acid molecules that act as inhibitors of the expression of repressor genes encoding the TR2 Orphan receptor, EAR3/COUP-TF-1, the GATA transcription factor gene, IRF-2 and/Or the CAATT Displacement Protein (CDP). Inhibition of the repressors removes prevents inhibition (and consequently increases expression of) genes involved in the production of erythropoietin, granulocyte colony stimulating factor protein and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleic acid delivery, nucleic acid transporter system; hormone; enzyme; growth factor; clotting factor; apolipoprotein; receptor; drug; oncogene; tumor antigen; tumor suppressor; viral antigen; parasitic antigen;
                                                                                                                                                                                                   Enzymatic and antisense nucleic acid inhibition of repressor genes, useful for producing e.g. granulocyte colony stimulating factor protein, interferon alpha and erythropoietin.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 11.4; DB 1; Length 17;
Pred. No. 7.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acid transporter system primer SEQ ID NO 5.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 5 A; 7 C; 3 G; 2 T; 0 U; 0 Other;
                                                                                                     Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                note= "5-methylcytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= c
/mod_base= Other
/note= "5-methylcytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /note= "5-methylcytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       not\overline{e} = "5-methylcytosine"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   note = "5-methylcytosine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                            Claim 54; Page 134; 164pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /*tag= a
/mod_base= Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /mod_base= Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /*tag= d
/mod_base= Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mod_base= Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAC82857 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    bacterial antigen; primer; ss
                                                                                                     Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7. Match 3.9%;
Local Similarity 92.3%;
nes 12; Conservative
                                                (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 917 TATCATCACCACC 929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAACATCACCACC 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                *tag= b
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               *tag= e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /*tag=
                                                                                                                                                      WPI; 2000-647423/62
                                                                                                   Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             interferon alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  modified base
12-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unidentified
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-MAR-2001
                                                                                                   Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAC82857;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1018
```

```
(FATT/) FATTAEY A R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                      12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-AUG-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                 ABK01050;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Blatt L,
                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BLAT/)
(MCSW/)
                                                                                                                                                                                                                                                                                                                                       RESULT 1020
                                                                                                                                                                                                                                                                                                                                                   ABK01050/c
                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                            This invention describes a novel system (I) for delivering a nucleic acid to a cell, comprising a binding complex comprising a ligand binding molecule noncovalently bound to a nucleic acid and covalently linked to a surface ligand, and a second binding complex comprising a second binding molecule noncovalently bound to a nucleic acid and covalently linked to ancelorar ligand. The complexes are similtaneously bound to the nucleic acid. The nucleic acid transporter system can also be used in a method for the in vivo targeting of the insertion of DNA into a cell. It can also be used in processes for producing transformed cell lines. The system can be used to deliver a variety or proteins and polypeptides, such as hormones, growth factors, enzymes, clotting factors, applipoprotechins, receptors, drugs, oncogenes, tumor antigens, tumor suppressors, viral antigens, parasitic antigens, and bacterial antigens. The transporter system uses lysis agents to overcome the problems of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; checkpoint kinase-1; Chk1; antisense; ribozyme; gene therapy;
                                                                                                                                                                             Nucleic acid transporter system for delivering nucleic acid into a cuseful for delivering proteins and polypeptides to cells, including growth factors, enzymes, hormones, and tumor suppressors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ·,
                                                                                                                                     WOO SLC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                          endosomal/lysosomal degradation seen with prior art systems
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1; Indels
                                                                                                                                     Smith LC,
                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 0 A; 5 C; 0 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 11.4; DB 1;
Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human Chkl ribozyme substrate SEQ ID NO: 390.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                     Sparrow J, Cristiano RJ,
                                                                                                                                                                                                                          Disclosure, Col 93-94; 105pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                               (BAYU ) BAYLOR COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAH94965/c
ID AAH94965 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-FEB-2000; 2000US-0179983P
                                              95US-00460971.
                                                                                          93US-00167641.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-FEB-2001; 2001WO-US003504
                                                                   92US-00855389.
                                                                              93WO-US002725.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       09-OCT-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 TTTTTTTTTTTTT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RNA cleavage; cancer; ss.
                                                                                                                                                           WPI; 2001-049093/06.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200157206-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                      Sottchalk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Simi
Matches 12;
                                              05-JUN-1995;
                                                                              19-MAR-1993;
                                                                                          14-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-AUG-2001
  US6150168-A
                        21-NOV-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAH94965;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  à
```

```
The present invention provides nucleic acid molecules capable of downregulating the expression of the human checkpoint kinase-1 (Chkl) gene. These may be antisense or ribozyme sequences, and are useful in the treatment of diseases associated with conditions affected by Chkl levels, including cancer. The present sequence is an oligonucleotide described in the exemplification of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; antiparkinsonian; mescular; CD20; neuroprotective; antiparkinsonian; custing archine; notropic; neuroprotective; antiparkinsonian; bnAzyme; inozyme; inozyme; dever; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; Munan immundeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cenebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemocherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; parkinson's disease; adisease; multiple sclerosis; parkinson's disease; multiple sclerosis; parkinson's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                       Novel nucleic acid molecule e.g., ribozymes or antisense nucleic acid molecules, which downregulates expression of a checkpoint kinase-1 gene, useful for treating colorectal, lung, breast or prostate cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
Booher RN, Holman PS;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 7.4e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 6 A; 3 C; 2 G; 0 T; 6 U; 0 Other;
             Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 4; Page 60; 115pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABK01050 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       11-FEB-2000, 2000US-0181797P.
28-FEB-2000, 2000US-0185516P.
06-MAR-2000, 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-FEB-2001; 2001WO-US004273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                935 CCAGAGAATTTTA 947
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATAGAATTTTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human NOGO Inozyme #320.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM
             Fattaey AR, Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLATT L.
MCSWIGGEN J.
CHOWRIRA B M.
                                                                                                                                         WPI; 2001-496922/54.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200159103-A2
```

ö

WPI; 2001-607195/69.

and Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, central nervous system injury.

Claim 88; Page 83; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGCO). The nucleic acids and an inozyme (an enurite growth inhibitor gene (NGCO). The nucleic acids an Inozyme (an enalytic nucleic acid cleaving a an RNA molecule possessing an NCH moltif), a G-cleaver (cleaving RNA with a NYN motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NYN motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a presence of a divalent cation that is preferably Mg^2+.

CC with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^2+.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the CD20. The treatment may further comprise the use of one or more of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to cleakemia, HIV (human immunodeficiency virus) associated with, numbnoma, HUV, human immunodeficiency virus) associated WHL, mantle-cell lymphoma (MCL), immunocytoma (MC), small B-cell lymphocytic lymphoma, in the compensation of the coleave RNA of the NGO gene in the presence of a divalent cation that is preferably Mg^2+. Furthermore, the comprise the use of one or more classed may be contacted with a cell to reduce NGO gene in the presence of a divalent cation that is preferably Mg^2+. Furthermore, the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell of such and activity of the contacted with activity sequence is an inozyme of the invention

Sequence 17 BP; 5 A; 2 C; 4 G; 0 T; 6 U; 0 Other;

Gaps ; 0 Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels 1; Indels 3.9%; 92.3%; 12; Conservative est Local Similarity Matches

ö

à g RESULT 1021 ABK01051/c

ABK01051 standard; RNA; 17 BP. THE REAL PROPERTY OF THE REAL

ABK01051;

12-MAR-2002 (first entry)

Human NOGO Inozyme #321.

cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; d-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphoma; neukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;

Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

Homo sapiens. Synthetic.

WO200159103-A2

16-AUG-2001

09-FEB-2001; 2001WO-US004273

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P.

28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P.

(RIBO-) RIBOZYME PHARM INC. CHOWRIRA B M BLATT L. MCSWIGGEN J. (CHOM/) BLAT/) MCSW/)

Chowrira BM; Mcswiggen J, Blatt L,

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88; Page 83; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down correspicates expression of a neurite growth inhibitor gene (NGO3). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA cc or CD20 in the presence of a divalent cation that is preferably NG²+.

C Furthermore, it may be contacted with a condition associated with the level of CD20. The treatment may further comprise the use of one or more cc therapies. In particular, the CD20 targetting nucleic acid may be used to therapies. In particular, B-cell lymphoma, low-grade or follicular non-Hodgytin's lymphoma (NHL), bulkly low-grade or follicular non-Hodgytin's lymphoma (NHC), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immunocytoma (IMC), small B-cell lymphocytic lymphoma, confined may be used to cleave RNA of the NGO gene in the conclasted with a cell to reduce NGO activity of the conclasted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the contacted with a cell to reduce NGO activity of the coll and a personate and with a cell to reduce NGO activity of the coll and a series a series and may be contacted with a cell to reduce NGO activity of the coll and a series and may be contacted with a cell to reduce NGO activity of the coll series as a series and the coll series and the coll series and the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS).

Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is an inozyme of the invention 

Sequence 17 BP; 6 A; 3 C; 4 G; 0 T; 4 U; 0 Other;

3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels 92.3%; Query Match
Best Local Similarity 92.39
Matches 12; Conservative

.. 0

Gaps

. 0

839 TICTCTGAAGACA 851

8 g

14 TTTTCTGAAGACA 2

```
The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule consessing an NCH motif), a G-cleaver (cleaving RNA with a NNN motif) processing an NCH motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA cofficient in may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more the cell and treatment way further comprise the use of one or more conformant, lewapeneau, leukaemia, B-cell lymphoma, low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytona (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO gene in the transplement cation that is preferably Mg^2+. Furthermore, the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; MLL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arkbropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                                                                                                                                                                           Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Chowrira BM;
                                                                                                                                                                                                                                                                                                                                              Human NOGO Hammerhead Ribozyme #169.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 88; Page 68; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    central nervous system injury.
                                                                                  ABK00169 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-FEB-2001; 2001WO-US004273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC.
(BLAT/) BLATT L.
                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2001-607195/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16-AUG-2001.
                                                                                                                                                                                                                                                                12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic.
                                                                                                                                                                         ABK00169;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (CHOM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (MCSM/)
RESULT 1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ношо
                                         ABK00169,
```

```
nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, anyotrophic lateral sclerosis (MS), chemotherapy-induced neuropathy, anyotrophic lateral sclerosis (MS), darses, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present
                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; d-cleaver; amberzyme; zinzyme; lymphoma; neu-fodgkin's lymphoma; NHL; lymphoma; leukaemia; human immunodeficiency virus; HTV associated NHL; mantle-cell lymphoma; MCI; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; Parkinson's disease; ataxia; Huntington's disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.
                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                             Score 11.4; DB 1; Length 17;
Pred. No. 7.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                        sequence is a hammerhead ribozyme of the invention
                                                                                                                                                                                                                                           Sequence 17 BP; 6 A; 2 C; 4 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABK01935 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                   3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                              839 TTCTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                   Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                   15 rrrrcrchadach 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human NOGO Zinzyme #257.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MCSWIGGEN J.
CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-607195/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BLATT L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200159103-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABK01935;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (BLAT/) H
(MCSW/) N
(CHOW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABK01935,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82888888888888888
                                                                                                                                                                                                                                                                                                                                                                   ð
```

16-AUG-2001

```
The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGCO). The conclude acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NYM motif) a G-cleaver (cleaving RNA with a NYM motif) promised an amberzyme (cleaving RNA with a NWA with a NYM motif) promised an amberzyme (cleaving RNA with a NWA with a VMA with a VMA with a NWA the CCC with a YMA motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^2+.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to cleave RNA of the NGCO. The treatment is preferably Mg^2+. Furthermore, the CCC targetting nucleic acid is used to cleave RNA of the NGCO gene in the presence of a divalent cation that is preferably Mg^2+. Furthermore, the CCC targetting nucleic acid may be contacted with a coll to reduce NGCO activity of the cell and treat a patient having a condition associated with the level of therapies. In particular, the NGCO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cereborovascular acident central nervous system (RNS) injury and cereborovascular acident the states which respond neuropstry and cereborovascular acident central nervous system (RNS) injury and cereborovascular acident disease, ataxia, Huntington's disease, centracted neuropstry, and/or other neurodegenerative disease states which respond to the moutherapy. The present contacted the proper of the present sequence of states which respond to the present o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 6 A; 4 C; 3 G; 0 T; 4 U; 0 Other;
   Claim 88; Page 100; 200pp; English.
```

```
Score 11.4; DB 1; Length 17;
Pred. No. 7.4e+02;
0; Mismatches 1; Indels
                         1; Indels
 3.9%;
                                              719 AGAGTGACTCTGG 731
           Local Similarity 92.3
hes 12; Conservative
                                                             Matches
                                              à
```

Gaps

·,

ABK01138 standard; RNA; 17 BP. 12-MAR-2002 (first entry) Human NOGO Inozyme #408. ABK01138; 

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurice growth inhibitor gene; MOGO; hammerhead ribozyme; DNAxyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; b-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human ilmunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; acaxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

Homo sapiens

W0200159103-A2.

```
The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down cepulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids caids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids cleaving an RNA molecule possessing an NCH motif, a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif, a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif, a G-cleaver (cleaving RNA with a NNN motif) proposessing an NCH motif, a G-cleaver (cleaving RNA with a NNN motif) with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA cof CD20 in the presence of a divalent cation that is preferably Mg^2+.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (MLL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, leukaemia, HUV (human immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, craftent may further comprise the use of one or more craftent cation that is preferably Mg^2+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the crargetent may further comprise the use of one or more content cation that is preferably Mg^2+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the contacted with a cell to reduce NOGO activity of the contacted with the NOGO-Largetting nucleic acid may be contacted with a cell to reduce NOGO. The treatment may further comprise the use of one or more contacted contacted with NOGO-Largetting nucleic acid may be contacted with NOGO-Largetting nucleic contac
                                                                                                                                                                                                                                                                                                                                                                                                      Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modulation of NOGO expression. The present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 4 A; 4 C; 3 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequence is an inozyme of the invention
                                                                                                                                                                                                                                                                                                                 Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 88; Page 84; 200pp; English.
                                                                                                               28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                               09-FEB-2001; 2001WO-US004273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92.3%;
                                                                                                                                                                                            RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            972 CTAAATCTGGTGT 984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           states which respond to
                                                                                                                                                                                                                                                                                                               Blatt L, Mcswiggen J,
                                                                                                                                                                                                                                                                CHOWRIRA B M.
                                                                                                                                                                                                                BLATT L.
MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-607195/69.
                                                                                              11-FEB-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                          (RIBO-)
                                                                                                                                                                                                                                                                  (CHOM/)
                                                                                                                                                                                                                   (BLAT/)
                                                                                                                                                                                                                                            (MCSM/)
ò
```

Gaps ABK00168 standard; RNA; 17 BP. 16 CTAAATCTGGAGT ABK00168; RESULT 1025 ABK00168/ BXXX

. 0

Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a hammerhead ribozyme of the invention

6 A; 2 C; 3 G; 0 T; 6 U; 0 Other;

; 0

The invention relates to a nucleic acid molecule which down regulates expression of a neutite growth inhibitor gene (NGGO). The capulates expression of a neutite growth inhibitor gene (NGGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving an RNA molecule DNAzyme) an Inozyme (an endolytic nucleic acid cleaving an RNA molecule possessing an NGH motif), a C-leaver (Cleaving RNA with an NGW triplet), a zinzyme (cleaving RNA with an NGW triplet), a zinzyme (cleaving RNA with an NGW triplet), a zinzyme (cleaving RNA with a vidy motif). The CD20-targetting nucleic acid is used to cleave RNA cc f CD20 in the presence of a divalent cation that is preferably Mg²2+.

The cell and treat a patient having a condition associated with the level cor f CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma (MLL), bulky low-grade or follicular nontreat lymphoma (MLL), immunofficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunofficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunofficiency virus) associated NHL, mantle-cell cor and we be contacted with a cell to reduce NOGO entributed acid may be contacted with a cell to reduce NOGO activity of the tragetting nucleic acid may be contacted with a cell to reduce NOGO activity of the coll and treat a patient having a condition associated with the level of nogo. The treatment may further comprise the use of one or more cell and treat a patient having a condition associated with the level of nogo. The treatment may further comprise the use of one or more condenced by a patient having a condition associated with the level of treat central nervous system (CNS) injury and cerebrovascular acident (CNS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Claim 88; Page 68; 200pp; English. 

```
Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; DNAzyme; DNAzyme; G-Cleaver; amberzyme; zinzyme; Ilymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; cerebroterapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chowrira BM;
                                                             Human NOGO Hammerhead Ribozyme #168.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-FEB-2000; 2000US-0181797P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-FEB-2001; 2001WO-US004273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RIBOZYME PHARM INC.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLATT L.
MCSWIGGEN J.
CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2001-607195/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16-AUG-2001
12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Blatt L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MCSW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLAT/)
```

```
The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule
                                                                                                                                                                                                                                                                                                                                                                                                                        cerebroprotective, notropic, neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; MNZyme; intozyme; intozyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHI; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHI; mantle-cell lymphoma; hucl; immunocytoma; MC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; has parkinson's disease; ataxia; Huntingcon's disease; creuzieldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                                                                                                                                                              Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic;
                                                                                                                                     Gaps
                                                                                                                                     ö
                                                                                                    Length 17;
                                                                                                                                    1; Indels
                                                                                                      Score 11.4; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                Human NOGO Hammerhead Ribozyme #277.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 88; Page 70; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               central nervous system injury.
                                                                                                                                                                                                                                                                                     ABK00277 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0197128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-FEB-2001; 2001WO-US004273
                                                                                                       3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (RIBO-) RIBOZYME PHARM INC. (BLAT/) BLATT L.
                                                                                                                                                                       839 TICTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                        1 Similarity 92.3
12; Conservative
                                                                                                                                                                                                     TTTTCTGAAGACA 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CHOWRIRA B M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2001-607195/69.
                                                                         Sequence 17 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200159103-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens.
                                                                                                                                                                                                                                                                                                                                                  12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Blatt L,
                                                                                                                                                                                                                                                                                                                     ABK00277;
                                                                                                       Query Match
Best Local S
                                                                                                                                                                                                       16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHOW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MCSM/)
                                                                                                                                                                                                                                                      RESULT 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo
                                                                                                                                          Matches
                                                                                                                                                                                                                                                                      ABK00277,
                                                                                                                                                                                                                                                                                                                     ò
                                                                                                                                                                                                       음
```

and

RIBOZYME PHARM INC.

```
8555555555555555555555555555555555
```

Sequence 17 BP; 5 A; 5 C; 3 G; 0 T; 4 U; 0 Other; Ouery Match

14 AGAGTGACTCTTG 2 ð

Human NOGO Inozyme #45.

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; WOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; lymphoma; lumberded ribozyme; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; Human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; central raccident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

16-AUG-2001

09-FEB-2001; 2001WO-US004273.

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P.

cc an amberzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA CC of CD20 in the presence of a divalent cation that is preferably Mg²⁺.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level cf CD20. The treatment may further comprise the use of one or more the cell and treat a patient having a condition associated with the level cf therapies. In particular, bulky low-grade or follicular non-flodgkin's lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-flodgkin's lymphoma (NHL), bulky low-grade or follicular NHL, mantle-cell lymphoma (MLL), immunocyticne (TMC), small B-cell lymphocytic lymphoma, immunocyticne (TMC), small B-cell lymphocytic lymphoma, immunocyticne (TMC), small B-cell lymphocytic lymphoma, immunocyticne acid used to cleave RNA of the NOGO gene in the correspecting nucleic acid may be contacted with a celuce NOGO activity of the correspect a particular, the NOGO-erapetting nucleic acid may be used to cleave RNA of the use of one or more call and treat a patient having a condition associated with the level of therapies. In particular, the NOGO-erapetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CNA, Stroke) Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amydor other neurodegenerative disease corresponds a harmenthand rithory and/or other neurodegenerative disease corresponds a harmenthand rithoryme of the neurodegenerative is a harmenthand rithoryme of the neurodegenerative is a harmenthand rithorymenthand rithorymenthand rithorymenthand rithorymenthand removed the removed the removed the removed the removed the removed the removed to the menthand rithorymenthand rithorymenthand rithorymenthand rem sequence is a hammerhead ribozyme of the invention

Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels 3.9%; 719 AGAGTGACTCTGG 731 12; Conservative Best Local Similarity Matches

; 0

Gaps

.; 0

ABK00775 standard; RNA; 17 BP. 12-MAR-2002 (first entry) ABK00775; RESULT 1027 ABK00775

WO200159103-A2. Homo sapiens Synthetic

The invention relates to a nucleic acid molecule which down regulates expression of a cD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving a an RNA molecule possessing an NCH motifi), a G-cleaver (cleaving RNA with a NYM motif) proposessing an NCH motifi) a G-cleaver (cleaving RNA with an NYM motif) proposessing an NCH motifi). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg^2+.

Furthermore, it may be contacted with a coll to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of close or more theraples. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-flogkin's lymphoma (MEL), immunocytoma (RNE), bulky low-grade or follicular non-flogkin's lymphocytocoma (RNE), small B-cell lymphocytic lymphoma, inthe thrombomy (RNE), bulky low-grade or follicular NHE, mantle-cell lymphoma (MCL), immunocytoma (RNE), small B-cell lymphocytic lymphoma, intendentic acid may be contacted with a cell to reduce NOGO gene in the presence of a divalent cation that is preferably Mg^2+. Purthermore, the coll and treat a patient having a condition associated MHE, mantle-cell NOGO. The treatment may further comprise the use of one or more coll and treat a patient having a condition associated may be cused to theraptes. In particular, the NOGO-targetting nucleic acid may be cused to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), parkinson's disease, ataxia, Huntington's disease, creating to her present contente is an inozyme of the invention Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and sequence is an inozyme of the invention Chowrira BM; Claim 88; Page 78; 200pp; English. central nervous system injury. 11; Conservative Mcswiggen J, CHOWRIRA B M. BLATT L. MCSWIGGEN J. WPI; 2001-607195/69. Query Match Best Local Similarity Matches 11; Conserv Blatt L, (RIBO-) 1 (BLAT/) 1 (MCSW/) 1 CHOM/) 

Sequence 17 BP; 3 A; 10 C; 1 G; 0 T; 3 U; 0 Other;

0; Gaps 3.9%; Score 11.4; DB 1; Length 17; 84.6%; Pred. No. 7.4e+02; ive 1; Mismatches 1; Indels

; 0

à

ABK02514;

ABK02514 standard; RNA; 17 BP.

RESULT 1028 ABK02514/c 12-MAR-2002 (first entry)

Human NOGO Amberzyme #186. 

Human, ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme;

B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell Lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy.induced neuropathy; ampotrophic lateral sclerosis; Parkinson's disease; ataxia; Huntington's disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease. inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia;

Homo sapiens. Synthetic.

16-AUG-2001.

09-FEB-2001; 2001WO-US004273

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P.

RIBOZYME PHARM INC. MCSWIGGEN J. BLATT (MCSM/)

Chowrira BM; Mcswiggen J, Blatt L,

WPI; 2001-607195/69.

and Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, central nervous system injury.

Claim 88; Page 134; 200pp; English.

contraction relates to a nucleic acid molecule which down carperssion of a cD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving an RNA molecule possessing an NCH motif), a G-cleaver (cleaving RNA with a NNN motif) prossessing an NCH motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA cof CD20 in the presence of a divalent cation that is preferably Mg² +. CT Furthermore, it may be contacted with a cell to reduce CD20 accivity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, he CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-thoughtone, low-grade or follicular non-thoughtone, low-grade or follicular non-text lymphoma (MCL), immunocytoma (TMC), small B-cell lymphocytic lymphoma, immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (TMC), small B-cell lymphocytic lymphoma, immunodeficiency virus) associated with mantle-cell lymphoma (MCL), immunocytoma (TMC), small B-cell lymphocytic lymphoma, immunodeficiency virus) associated with mantle-cell lymphoma (MCL), immunocytoma (TMC), small B-cell lymphocytic lymphoma, immunodeficiency virus) associated with the level of crasetting nucleic acid may be contacted with a cell to reduce NOGO activity of the nucleic acid may be contacted with a cell to reduce NOGO activity of the creat central nervous system (CNS) injury and cerebrovascular accident treat mantle acid with a respond to the morpe disease, dementa, multiple aclerosis (MS), chemotic an ambaryama molecular, Huntington's disease, cerebral with the level of the pa The invention relates to a nucleic acid molecule which down regulates sequence is an amberzyme molecule of the invention

BP; 12 A; 0 C; 4 G; 0 T; 1 U; 0 Other; 11 Sequence

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acids (e.g. a ribozyme or a DNAzyme) an Inozyme (an endolytic nucleic acid cleaving a an RNA molecule an emberzyme (cleaving RNA with an NSW motif) prossessing an NCH motif), a G-cleaving RNA with a NSW motif) profice acid is used to cleaving RNA with a YGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably Mg'2+. Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more

Claim 88; Page 114; 200pp; English.

central nervous system injury

```
ö
                                                                                                                                                                                                                                                                          cerebroprotective; noctropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOG0; hammerhead ribozyme; DNAzyme; niozyme; noctropic; ambertyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin; slymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; huch; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and
                                                                                                                                                                                                                                                                antisense therapy; cytostatic; antiinflammatory; haemostatic;
                              Gaps
                              ..
0
Length 17;
Score 11.4; DB 1; Length 1 Pred. No. 7.4e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chowrira BM;
                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 09-FEB-2001; 2001WO-US004273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                      ABK02188 standard; RNA; 17
                                                         832 TCTTTTCTTCT 844
                                                                                                                                                                                                             (first entry)
 Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                         Human NOGO DNAzyme #100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen J,
                                                                                     TCTTTTCTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BLATT L.
MCSWIGGEN J.
CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2001-607195/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens.
                                                                                                                                                                                                             12-MAR-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-AUG-2001
                                                                                                                                                                                                                                                                      38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Blatt L,
                                                                                                                                                                                   ABK02188;
                                                                                     15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (BLAT/)
(MCSW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CHOM/)
                                                                                                                              RESULT 1029
                                                                                                                                           ABK02188/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo
                                                                                                                                                                                   à
                                                                                    용
```

therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-Hodgkin's lymphoma (MEL), bulky low-grade or follicular NHL, lymphocytic leukaemia, HIV (human immunodeficiency virus) associated MHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, commune thrombocytopeania, and inflammatory arthropathy. The NOGO-targetting nucleic acid is used to cleave RNA of the NOGO gene in the presence of a divalent cation that is preferably MG'2'+ Furthermore, the presence of a divalent cation that is preferably MG'2'+ Furthermore, the complete acid may be contacted with a cell to reduce NOGO gene in the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CNA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), chemotherapy-induced neuropathy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is a DNAzyme molecule of the invention 

Sequence 17 BP; 5 A; 4 C; 3 G; 0 T; 5 U; 0 Other;

3.9%; Score 11.4; DB 1; Length 17; 22.3%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels 92.3%; 972 CTAAATCTGGTGT 984 Local Similarity 92.3 nes 12; Conservative 14 CTAAATCTGGAGT 2 Query Match Matches à

ö

RESULT 1030

ABK00776 standard; RNA; 17 BP. ABK0077

ABK00776; 

12-MAR-2002 (first entry)

Human NOGO Inozyme #46.

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCL; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

sapiens. Homo

Synthetic.

16-AUG-2001.

WO200159103-A2.

09-FEB-2001; 2001WO-US004273.

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P.

BLATT L. MCSWIGGEN J. (BLAT/) I

(RIBO-) RIBOZYME PHARM INC.

(CHOW/) CHOWRIRA B M.

Chowrira BM; Mcswiggen J, Blatt L,

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88; Page 78; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down cegniates expression of a neurite growth inhibitor gene (NGOD). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a NCH motif), a Goleaver (cleaving RNA with a NKN motif) propersory of the possessing an NCH motif), a Goleaver (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA condition associated with the level of CD2 of CD20. The treatment may further campine acid with the level condition associated with the level condition associated with the level of CD20. The treatment may further comprise the use of one or more creat lymphoma, levikaemia, B-cell lymphoma, low-grade or follicular non-flodgkin's lymphoma (MCL), immunocytoma (IMY) low-grade or follicular NHI, lymphoma, leukaemia, HIV (human immunodeficiency virus) associated NHI, lymphoma, immunodeficiency virus) associated NHI, lymphoma, immunodeficiency virus) associated NHI, lymphoma, immunocytoma (IMY), small B-cell lymphocytic lymphoma, cc traget contacted with a cell to reduce NOGO activity of the cragenence of a divalent cation that is preferably MG-2+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the contacted with a contacted with a cold may be used to therapies. In particular, the NOGO-cragetting nucleic acid may be used to treat central nervous system (NSO) injury and cerebrovacular acident (CWA, stroke) Alzheimer's disease, dementia, multiple sclerosis (ALS), chem muscular dystrophy, and/or other neurodegenerative disease nich respond to the modulation of NOGO expression. The present sequence is an inozyme of the invention states which respond to

Sequence 17 BP; 3 A; 10 C; 1 G; 0 T; 3 U; 0 Other;

Gaps 0; 3.9%; Score 11.4; DB 1; Length 17; 44.6%; Pred. No. 7.4e+02; ve 1; Mismatches 1; Indels Best Local Similarity 84.6%; Matches 11; Conservative

ö

926 CACCACCTTCCAG 938 1 cuccacccuccag 13 à

RESULT 1031 ABK02530/

12-MAR-2002 (first entry) ABK02530;

Human NOGO Amberzyme #202.

ABK02530 standard; RNA; 17

Human; ss; antisense therapy, cytostatic, antiinflammatory; haemostatic, cerebroprotective; noctropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; G-cleaver; amberzyme; inizyme; lymphoma; leukaemia; B-cell lymphoma; non-Hodgkin; slymphoma; NHL; lymphoma; leukaemia; human immunocytoma; INC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; 

rng.res

The invention relates to a nucleic acid molecule which down regulates expression of a cD20 gene and a nucleic acid molecule which down regulates expression of a neurite growth inhibitor gene (NDO). The nucleic acids (e.g. a ribozyme or a nucleic acids an NCH motif), a G-cleaver (cleaving RNA with a NRY motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NRY motif) proposessing an NCH motif), a G-cleaver (cleaving RNA with a NCH motif), a cleaving RNA with a NCH motif), a cleaving RNA with a NCH coll in the presence of a divalent cation that is preferably Mg² +.

CC CD20 in the presence of a divalent cation that is preferably Mg² +.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to create I ymphoma, (MLI), bulky low-grade or follicular NHL, lymphocytic lymphoma, leukaemia, HU (human immundeficiency virus) associated NHL, lymphocytic lymphoca (MCI), immunocytoma (IMC), small B-cell lymphocytic Iymphocytic argetting nucleic acid is used to cleave RNA of the NOGO gene in the nucleic acid may be contacted with a cell to reduce NOGO. The treatment may further comprise the use of one or more concent a patient having a condition associated with the level of therapies. In particular, the NOGO-targetting nucleic acid may be contacted with a cell to reduce NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be contacted with a cell to reduce NOGO activity of the contacted with a cell to reduce NOGO activity of the nocentherapy-induced neuropathy, and/or other neurolescopic acid may be contacted with a cell to reduce NOGO chargetting nucleic acid may be contacted with a cell to reduce NOGO Parkinson's disease; ataxia; Huntington's disease; Creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease. Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and Chowrira BM; Claim 88; Page 135; 200pp; English. central nervous system injury. 09-FEB-2001; 2001WO-US004273. 28-FEB-2000; 2000US-0185516P.06-MAR-2000; 2000US-0187128P. RIBOZYME PHARM INC. Mcswiggen J, (MCSW/) MCSWIGGEN J. (CHOW/) CHOWRIRA B M. WPI; 2001-607195/69. BLATT L. WO200159103-A2. 11-FEB-2000; Homo sapiens 16-AUG-2001 Synthetic. Blatt L, (RIBO-) BLAT/)

Sequence 17 BP; 5 A; 3 C; 3 G; 0 T; 6 U; 0 Other;

Gaps ., Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels · 0 Query Match 3.9%; Best Local Similarity 92.3%; 12; Conservative Matches

0

Human NOGO Inozyme #420. RESULT 1032 Ношо 

WO200159103-A2.

16-AUG-2001.

09-FEB-2001; 2001WO-US004273.

WPI; 2001-607195/69.

Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.

Claim 88; Page 84; 200pp; English.

The invention relates to a nucleic acid molecule which down regulates expression of a CD20 gene and a nucleic acid molecule which down cegulates expression of a neurite growth inhibitor gene (NGOD). The nucleic acids may be enzymatic nucleic acids (e.g. a ribozyme or a nucleic acids may be enzymatic nucleic acid cleaving a an RNA molecule possessing an NCH motif), a c-cleaver (cleaving RNA with a NYN motif) proposessing an NCH motif), a zinzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with an NGN triplet), a zinzyme (cleaving RNA with a YGN motif). The CD20-targeting nucleic acid is used to cleave RNA cross of cross in the presence of a divalent cation that is preferably Mg^2+.

Furthermore, it may be contacted with a cell to reduce CD20 activity of the cell and treat a patient having a condition associated with the level coff CD20. The treatment may further comprise the use of one or more therapies. In particular, the CD20 targetting nucleic acid may be used to treat lymphoma, leukaemia, B-cell lymphoma, low-grade or follicular non-flodkin's lymphoma (NHL), bulky low-grade or follicular NHL, lymphocytic lymphoma, laukaemia, munnocéficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, immune thrombocytopaenia, and inflammatory arthropathy. The NOGO gene in the targetting nucleic acid is used to cleave RNA of the NOGO gene in the

ABK01150

ABK01150 standard; RNA; 17 BP

ABK01150;

12-MAR-2002

(first entry)

Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; inozyme; Jecleaver; amberzyme; inizyme; leukaemia; B-cell lymphoma; non-Hodgkin's lymphoma; NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCI; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntingcon's disease; central cylerosis; disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.

sapiens. Synthetic.

11-FEB-2000; 2000US-0181797P. 28-FEB-2000; 2000US-0185516P. 06-MAR-2000; 2000US-0187128P.

RIBOZYME PHARM INC. (RIBO-) RIBOZYME PHARM (BLAT/) BLATT L. (MCSW/) MCSWIGGEN J. (CHOW/) CHOWRIRA B M. Chowrira BM; Blatt L, Mcswiggen J,

ð qq Claim 88; Page 133; 200pp; English.

```
0;
presence of a divalent cation that is preferably Mg^2^+. Furthermore, the nucleic acid may be contacted with a cell to reduce NOGO activity of the cell and treat a patient having a condition associated with the level of NOGO. The treatment may further comprise the use of one or more therapies. In particular, the NOGO-targetting nucleic acid may be used to treat central nervous system (CNS) injury and cerebrovascular accident (CVA, stroke), Alzheimer's disease, dementia, multiple sclerosis (MS), chemotherapy-induced neuropathy, amyotrophic lateral sclerosis (ALS), Parkinson's disease, ataxia, Huntington's disease, Creutzfeldt-Jakob disease, muscular dystrophy, and/or other neurodegenerative disease states which respond to the modulation of NOGO expression. The present sequence is an inozyme of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; ss; antisense therapy; cytostatic; antiinflammatory; haemostatic; cerebroprotective; nootropic; neuroprotective; antiparkinsonian; muscular; CD20; neurite growth inhibitor gene; NOGO; hammerhead ribozyme; DNAzyme; incypme; G-cleaver; amberzyme; zinzyme; lymphoma; leukaemia; human immunodeficiency virus; HIV associated NHL; lymphocytic leukaemia; human immunodeficiency virus; HIV associated NHL; mantle-cell lymphoma; MCI; immunocytoma; IMC; immune thrombocytopaenia; stroke; dementia; inflammatory arthropathy; central nervous system injury; cerebrovascular accident; CVA; Alzheimer's disease; multiple sclerosis; chemotherapy-induced neuropathy; amyotrophic lateral sclerosis; ALS; Parkinson's disease; ataxia; Huntington's disease; creutzfeldt-Jakob disease; muscular dystrophy; neurodegenerative disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acid molecules, e.g., enzymatic nucleic acids and antisense constructs, which down regulate expression of a CD20 gene or neurite growth inhibitor gene useful for treating, e.g., lymphoma, leukemia, and central nervous system injury.
                                                                                                                                                                                                                                                                                                                                                                 0:
                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                              Sequence 17 BP; 5 A; 6 C; 2 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chowrira BM;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABK02470 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-FEB-2000; 2000US-0181797P.
28-FEB-2000; 2000US-0185516P.
06-MAR-2000; 2000US-0187128P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               09-FEB-2001; 2001WO-US004273.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                        719 AGAGTGACTCTGG 731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12-MAR-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human NOGO Amberzyme #142.
                                                                                                                                                                                                                                                                                                                        Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                               13 AGAGTGACTCTTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Blatt L, Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CHOW/) CHOWRIRA B M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BLATT L.
MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2001-607195/69.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200159103-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16-AUG-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABK02470;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (BLAT/)
(MCSW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1033
```

```
contraction of a CD20 gene and a mucleic acid molecule which down regulates expression of a neurite acroid molecule which down regulates expression of a neurite growth inhibitor gene (NOGO). The mucleic acids may be enzymatic nucleic acid molecule (NOGO). The nucleic acids may be enzymatic nucleic acid cleaving a an RNA molecule possessing an NCH motif), a G-cleaving RNA with a NVN motif) prossessing an NCH motif), a G-cleaving RNA with a NVN motif) prossessing an NCH motif). The CD20-targetting nucleic acid is used to cleaving RNA with a vGY motif). The CD20-targetting nucleic acid is used to cleave RNA of CD20 in the presence of a divalent cation that is preferably MG'2+.

The coll and treat a patient having a condition associated with the level of CD20. The treatment may further comprise the use of one or more conference in particular, the CD20 targetting nucleic acid may be used to treat lymphoma, lenkaemia, B-cell lymphoma, long-grade or follicular NHL, lymphocytic lymphoma (NHL), bulky low-grade or follicular NHL, lymphoma, lenkaemia, HIV (human immunodeficiency virus) associated NHL, lymphoma, immunodeficiency virus) associated NHL, mantle-cell lymphoma (MCL), immunodeficiency virus) associated NHL, mantle-cell cymphoma (MCL), immunocytoma (IMC), small B-cell lymphocytic lymphoma, impure thrombocytopaenia, and inflammatory arthropathy. The NOGO crargetting nucleic acid may be contacted with a cell to reduce NOGO activity of the nucleic acid may be contacted with a cell to reduce NOGO activity of the therapies. In particular, the NOGO-targetting nucleic acid may be contacted with a cell to reduce NOGO activity of the therapies. In particular, the NOGO-targetting nucleic acid may be contacted with a cell to reduce NOGO activity of the therapies. In particular, the NOGO-targetting nucleic acid may be used to chemotherapy-induced neuropathy, amyor-contacted with the level of chemotherapy-induced neuropathy, amyor-contacted with a central nervous system (CNS), chemotherapy-induced neuropathy, and/or other neu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; gene therapy, adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOB; mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein E; LDLR; familial hypercholesterolaemia; UGTI; syndrome; APP; PSBN1; antisense; UDP-qlucuronosyltransferase; amyloid precursor protein; presentilin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
                                                                             The invention relates to a nucleic acid molecule which down regulates
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ·.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LDLR mutation correcting oligonucleotide SEQ ID NO: 3594.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sequence is an amberzyme molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 7 A; 3 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABA80748 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       839 TICTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-JAN-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13 TTTČTGAAGACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABA80748;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ABA80748/
ઠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ద
```

antilipemic; ss.

WO200173002-A2 Homo sapiens.

04-OCT-2001.

```
The present invention provides single-stranded oligonucleotides which can be used for the targeted alteration of genomic sequences, where the oligonucleotide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, cetinoblastoma, BRCAH, BRCAE, CFTR, cyclin-dependent kinase inhibitor 2A (CDKNZA), APC, Factor V, Factor VIII, Factor IX, haemoglobin alpha locus (CDKNZA), APC, Factor V, Ecceptor (LDLA), MLHI, MSHG, MSHG, apolioportein B (APCB), LDL receptor (LDLA), UDP-glucuronosyltransferase (UGTI), amyloid precursor protein (APC), presentlin-1 (PSEN1) and precursor protein (APC), presentlin-1 (PSEN1) and present adenosine deaminase deficiency, cystic fibrosis, haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and avarious syndromes. The present sequence is one of the gene correcting
                                                                                                                                                                                                                                                                                       Oligonucleotide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.
                                                                                                                                                                                                                                                                                                                                                                            Claim 7; Page 240; 294pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         oligonucleotides of the invention
                                                                                                                                                                                                    Rice MC
                                                              27-MAR-2000; 2000US-0192179F.
01-JUN-2000; 2000US-0208538F.
30-OCT-2000; 2000US-0244989F.
27-MAR-2001; 2001WO-US009761
                                           27-MAR-2000; 2000US-0192176P
                                                                                                                                                                                                    Kmiec EB, Gamper HB,
                                                                                                                                                        (UYDE ) UNIV DELAWARE
                                                                                                                                                                                                                                             WPI; 2001-639230/73.
```

3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ative 0; Mismatches 1; Indels Sequence 17 BP; 3 A; 4 C; 6 G; 4 T; 0 U; 0 Other; 882 GAGATGCACTTAC 894 Conservative 13 GAGATGCACTTCC 1 Local Similarity es 12; Conserv Query Match Matches ð 셤

Gaps .,

> ABA81193 standard; DNA; 17 BP (first entry) 24-JAN-2002 ABA81193; RESULT 1035 ABA81193

Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MiH1; APOE; mismatch repair; MSH2; MSH6; hyperlipidaemia; apolipoprotein B; LDLR; familial hypercholesterale; amyloid precursor protein; presenilin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic; APP mutation correcting oligonucleotide SEQ ID NO: 4039. antilipemic, ss

Homo sapiens

WO200173002-A2

04-OCT-2001

27-MAR-2001; 2001WO-US009761.

2000US-0192176P 27-MAR-2000; 01-JUN-2000; 27-MAR-2000; 

2000US-0192179P. 2000US-0208538P. 2000US-0244989P. 30-OCT-2000;

(UYDE ) UNIV DELAWARE.

Rice MC; Gamper HB, Kmiec EB,

WPI; 2001-639230/73.

Oligonucleotide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.

Claim 7; Page 262; 294pp; English.

The present invention provides single-stranded oligonuclectides which can be used for the targeted alteration of genomic sequences, where the oligonucleotide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, ethicolastoma, BRCA1, RRCA2, CPTR, cyclin-dependent kinase inhibitor 2A (CDKN2A), APC, Factor V, Factor VII, Factor IX, haemoglobin alpha locus (HBA1), haemoglobin alpha locus (HBA2), mLH1, MSH2, MSH6, apolioportein E (APCE), LDL receptor (LDLR), UDP-ducuronosyltransferase (UGT1), amyloid precursor protein (APC), presentlin-1 (PSEM1) and precursor protein (APC), presentlin-1 (PSEM1) and presentlin-2 (PSEM2). These can be used in the gene therapy of diseases such as cancer, adenosine deaminase deficiency, cystic fibrosis, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's disease, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting oligonucleotides of the invention

Sequence 17 BP; 3 A; 6 C; 3 G; 5 T; 0 U; 0 Other;

Gaps .; 0 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels 92.3%; Conservative Similarity Query Match Best Local Simil Matches 12; C

;

g

ABA80749 standard; DNA; 17 (first entry) 24-JAN-2002 ABA80749; RESULT 1036 ABA80749 

BP.

LDLR mutation correcting oligonucleotide SEQ ID NO: 3595.

retinoblastoma, BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V, vyclin-dependent kinase inhibitor 2A; CDKN2A; melanoma, APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOB; mismatch repair; MSH2; MSH6; hyperlipidaemia, apolipoprotein E; LDLR; familial hypercholesterolaemia; UGT1; syndrome; APP; PSENI, antisense; UDP-glucuronosyltransferase; awyloid precursor protein; presentlin-1; Alzheimer's disease; cytostatic; antisickling; antianaemio; haemostatic; gene therapy; adenosine deaminase deficiency; p53; beta-globin; antilipemic; ss.

Homo sapiens

WO200173002-A2

04-OCT-2001

```
Seguence 17 BP; 4 A; 6 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                Claim 7; Page 240; 294pp; English.
                                                                                                                                                                                                                                                                                                                ABA81192 standard; DNA; 17 BP
                           27-MAR-2000; 2000US-0192179P.
01-JUN-2000; 2000US-0208538P.
30-OCT-2000; 2000US-0244989P.
                                                                                                                                                                                                                                                  92.3%;
           27-MAR-2001; 2001WO-US009761.
                       2000US-0192176P
                                                                                                                                                                                                                                                                      882 GAGATGCACTTAC 894
                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                               5 GAGATGCACTICC 17
                                                                                                                                                                                                                                                   Local Similarity 92.3
nes 12; Conservative
                                                    (UYDE ) UNIV DELAWARE.
                                                                 Kmiec EB, Gamper HB,
                                                                            WPI; 2001-639230/73.
                                                                                                                                                                                                                                                                                                                                                                                                                      antilipemic; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200173002-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                     modification
                                                                                                                                                                                                                                                                                                                                        24-JAN-2002
                       27-MAR-2000;
                                                                                                                                                                                                                                                                                                                           ABA81192;
                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                  RESULT 1037
ABA81192/c
                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                à
                                                                                                                                                                                                                                                                                g
```

```
The present invention provides single-stranded oligonuclectides which can be used for the targeted alteration of genomic sequences, where the oligonuclectide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A (CDKN2A), APC, Pactor V, Factor VIII, Factor IX, haemoglobin alpha locus apolipoprotein E (APOB), LDL receptor (LDLR), WLH1, MSH2, MSH6, amyloid precursor protein (APC), presentiln-1 (PSEN1) and presentiln-2 (PSEN2). These can be used in the gene therapy of diseases such as cancer, adenosine deaminase deficiency, cystic fibrosis, happercholesterolaemia, thalassaemia, sickle cell anaemia, altones syndromes. The present sequence is one of the colon and carious syndromes. The present sequence is one of the gene correcting oligonucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Beta amyloid precursor protien; APP; antisense; Alzheimer's disease; ss.
                                                                                                                                                                                                                                                                                                                                                                                         Oligonucleotide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical modification.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wild-type beta amyloid precusor protein oligonucleotide #2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 5 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Claim 7; Page 262; 294pp; English.
                                                                                                                                                                                                                                                                                                           Rice MC;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAF58105 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%;
                                                                     27-MAR-2001; 2001WO-US009761.
                                                                                                                        2000US-0192176P.
2000US-0192179P.
                                                                                                                                                                           2000US-0208538P.
                                                                                                                                                                                                     30-OCT-2000; 2000US-0244989P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              799 AGAGCTCTCCTCC 811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |||| ||||||||
15 AGAGATCTCCTCC 3
                                                                                                                                                                                                                                                                                                        Gamper HB,
                                                                                                                                                                                                                                                      (UYDE ) UNIV DELAWARE
                                                                                                                                                                                                                                                                                                                                                           WPI; 2001-639230/73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US6177246-B1.
                                                                                                                                                                        01-JUN-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19-APR-2001
                                                                                                                           27-MAR-2000;
                        04-OCT-2001
                                                                                                                                                                                                                                                                                                        Kmiec EB,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAF58105;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1038
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention provides single-stranded oligonuclectides which can be used for the targeted alteration of genomic sequences, where the oligonuclectide has at least one mismatch compared with the genomic sequence to be altered. In particular, these sequences are directed at the following genes: adenosine deaminase, p53, beta-globin, retinoblastoma, BRCA1, BRCA2, CFTR, cyclin-dependent kinase inhibitor 2A (CDKN2A), APC, Factor VII, Factor IX, haemoglobin alpha locus (CDKN2A), APC, Factor VII, Factor IX, haemoglobin alpha locus (I (HBA1), haemoglobin alpha locus 2 (HBA2), MLH1, MSH2, MSH6, apolipoprotein E (APOE), IDL receptor (LDLR), UDP-glucuronosyltransferase (UGTI), amyloid precursor protein (APC), presenilin-1 (PSENI) and presentin-2 (PSENI) and presentinal adeaminase deficiency, cystic fibrosis, such as cancer, adenosine deaminase deficiency, cystic fibrosis, haemophilia, hypercholesterolaemia, thalassaemia, sickle cell anaemia, Alzheimer's dilesse, melanoma, adenomatous polyposis of the colon and various syndromes. The present sequence is one of the gene correcting oligonucleotides of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; gene therapy; adenosine deaminase deficiency; p53; beta-globin; retinoblastoma; BRCA1; BRCA2; CFTR; cystic fibrosis; cancer; Factor V; cyclin-dependent kinase inhibitor 2A; CDRVA3, melanoma; APC; HBA1; HBA2; adenomatous polyposis of the colon; Factor VII; Factor IX; thrombosis; haemophilia; alpha thalassaemia; haemoglobin alpha locus 1; MLH1; APOB; mismatch repair, MSH2; MSH6; hyperlipidaemia; apolipoprotein B; LDLR; familial hypercholesterolaemia; UGTI; syndrome; APP; PSEN1; antisense; UDP-glucuromosyltransferase; amyloid precursor protein; presentilin-1; Alzheimer's disease; cytostatic; antisickling; antianaemic; haemostatic;
                                                                                                                                                                                                                                                                                                                                                                                      Oligonucleotide for targeted alterations of genetic sequences and for treating cystic fibrosis, comprises at least one mismatch and chemical
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APP mutation correcting oligonucleotide SEQ ID NO: 4038.
```

ö

Gaps

·: 0

98US-00192657. 91US-00814963.

16-NOV-1998; 24-DEC-1991; 28-OCT-1994;

23-JAN-2001

DJ:

Ecker

Freier SM,

(ISIS-) ISIS PHARM INC

```
WPI; 2001-158569/16.
   Monia BP,
                              disease
```

```
The present invention relates to modulating abnormal expression of a beta -amyloid precursor protein (APP) gene, involving an antisense oligonucleotide that specifically hybridizes with APP nucleic acid. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     invention is useful for modulating abnormal expression of a gene encoding APP and for treating and diagnosing conditions arising from abnormal expression, overexpression or mutation of the gene, such as Alzheimer's
Modulating abnormal expression of a beta-amyloid precursor protein (APP) gene, involves contacting tissue or cell comprising the gene with an oligonucleotide specifically hybridizable with a polynucleotide encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 4 A; 2 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                   Claim 1; Col 12; 24pp; English.
                                                                                                                                                                            abnormally expressed APP.
```

```
Infection; antisense RNA; ribozyme; DNAzyme; antiviral; gene therapy;
papilloma virus; hepatitis B virus; cytotoxic; cytostatic; wart;
cervical dysplasia; cervical carcinoma; carcinoma; laryngeal papilloma;
                                               Gaps
                                               ..
3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.48+02; ive 0; Mismatches 1; Indels
                                           Indels
                                                                                                                                                                                                                                                                                                                                                    HPV11 DNAzyme target sequence SEQ ID NO AK.
                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                            ABA02622 standard; DNA; 17
                                                                                914 GATTATCATCACC 926
                                                                                                                                                                                                                                                                                                             (first entry)
                                             Conservative
                                                                                                                         GATCATCATCACC 1
               Best_Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                             05-FEB-2002
                                                                                                                         13
                                                                                                                                                                                                                                                                      ABA02622;
                                                                                                                                                                                     RESULT 1039
                                                                                  à
                                                                                                                    qq
```

ô

Query Match

```
Novel nucleic acid for the treatment of papilloma or hepatitis virus induced conditions comprises a catalytic region which produces a cytotoxic or cytostatic effect in the infected cell.
                                                                                                                                                                                                                      Schmidt MG;
                                                                                                                                                                                                                    Schofield D,
                                                                                                                                                                                                                    Westwater C,
                                                                                                                                                                                                                                                                                          Claim 1; Page 101; 143pp; English.
                                                                                                                                                     13-APR-2001; 2001WO-US012130.
                                                                                                                                                                   13-APR-2000; 2000US-00548449.
07-DEC-2000; 2000US-0251810P.
                                                                                                                                                                                           (UYSC-) UNIV SOUTH CAROLINA.
(PENN-) PENN STATE RES FOUND
                                                                                                                                                                                                                    Clawson GA, 1
                                                                                                                                                                                                                                           WPI; 2001-607700/69.
                                                                                                                                                                                                                  , JS, Ling
                                                                                                                     WO200179524-A2
                                                                                                                                     25-OCT-2001
                                                                                                                                                                                                                    Norris JS
Hoel B,
```

Unidentified.

The invention relates to the discovery, identification and

Nucleic acid transport system, useful for creating transgenic animals for

```
targeting such toxic agents to a perioguia and microlar infected cells in order to treat and/or eradicate the infection. In particular the corder to treat and/or eradicate the infection. In particular the corder to treat and/or eradicate the infection. In particular the corder to a least one nucleic acid molecule, which specifically hybridises to mRNA encoding at least one vital protein associated with the transformation or plasmid copy number control, which thy pridises to a viral polyadenylation signal or a core, pre core or polymerase encoding sequence. Specifically, the invention relates to the delivery of one or more toxic gene products, antisense RNAs, ribozymes, cortivity and can be used in gene therapy. They are useful for the activity and can be used in gene therapy. They are useful for the creatment of papilloma or hepatitis virus induced conditions and can produce a cytotoxic or cytostatic effect in papillomavirus or hepatitis B infected cells. The papilloma virus induced condition is selected from warts, cervical dysplasia, cervical carcinoma, carcinoma in situ and laryngeal papilloma. ABA02588-ABA02610 comprise ribozyme flanking sequences, useful
                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pyrimidine-rich oligonucleotide #2 used in nucleic acid transport system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   transport, cytosis, ligand, lysis agent, spacer molecule, hepatocyte; muscle, bone forming cell, oligonucleotide;
                                                                                                                                                                                                                                                                                                                                                                   Gaps
 characterisation of toxic agents lethal to pathogens and methods for
                                                                                                                                                                                                                                                                                                                                                                    .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sparrow J;
                                                                                                                                                                                                                                                                                                                                  Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 3 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gottchalk S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Cristiano RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COLLEGE MEDICINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mod_base= m5c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mSc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAS08467 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                   3.9%;
92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95US-00462040.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 93WO-US002725.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92US-00855389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16. .17
/*tag= c
/mod_base= 1
                                                                                                                                                                                                                                                                                                                                                                                                765 GCCTCCACTTCTG 777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Д
                                                                                                                                                                                                                                                                                                                                                Local Similarity 92.3
                                                                                                                                                                                                                                                                                                                                                                                                                            GCCTCCACGTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 . .10
*tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               *tag=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Woo SLC, Smith LC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2001-365933/38
                                                                                                                                                                                                                                                                     to the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (BAYU ) BAYLOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-JUN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20-MAR-1992;
19-MAR-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                14-DEC-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US6177554-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-JAN-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                            Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAS08467;
                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1040
                                                                                                                                                                                                                                                                                                                                                Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAS08467
8888888888888888888888888888888
                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

```
The sequence represents the pyrimidine-rich oligonucleotide #2 used in a nucleic acid transporter system. The nucleic acid transporter system uses nucleic acid binding complexes containing surface ligands which are capable of binding to a cell surface receptor and entering the cell through cytosis. The compounds of the invention are either ligands, binding molecules (surface ligands), lysis agents, spacer molecules or their intermediates. The ligands, binding molecules, lysis agents and spacer molecules are used in nucleic acid transporter systems to deliver nucleic acid into specific cells e.g. in gene therapy to deliver nucleic acid into hepatocytes, muscle cells or bone forming cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6052.
                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                          Length 17;
assessing human disease such as cancer in an animal model.
                                                                                                                                                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Chen W,
                                                                                                                                                                                                                          Sequence 17 BP; 0 A; 5 C; 0 G; 12 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                      Score 11.4; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanzel DK,
                             Disclosure; Fig 15; 111pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001; 2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; 2001WO-US000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001US-0266860P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0234687P
2000US-0236359P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000US-0207456P
                                                                                                                                                                                                                                                           3.9%;
                                                                                                                                                                                                                                                                         92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                             ABN06060 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                     832 TCTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                  TTTTTTCTTCTCT 13
                                                                                                                                                                                                                                                                         Local Similarity 92.3
nes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-SEP-2000;
27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABN06060;
                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                              Gu Y,
    à
                                                                                                                                                                                                                                                                                                                                                  셤
```

```
the present invention describes a nument percent welvestifully.

The protein 1 (hGDMLP-1). The protein and polymucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids can be used as probes to detect, characterises, to hGDMLP-1 nucleic acids can be used as probes to detect, characterises, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for caprossing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as specifically of hGDMLP-1 proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, and or anount specifically of hGDMLP-1 may be used for diagnosing a conduction, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The column skeletal muscle disorders. hGDMLP-1 may be used for diagnosing a polymiclectide sequences encoding hGDMLP-1 may be used for diagnosing a classer associated with the expression of hGDMLP-1 in particular heart can disorders sequence ein the expression of hGDMLP-1. Sequence data for this patent did not form at the printed captured data for this patent did not form at directly from WIPO specification, but was obtained in electronic format directly from WIPO cat fitp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9915.
                                                    The present invention describes a human genome-derived myosin-like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 7 A; 2 C; 7 G; 1 T; 0 U; 0 Other;
                Disclosure; SEQ ID NO 6052; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABN09923 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0207456P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000US-0236359P.
2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001WO-US000664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001WO-US000666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2001WO-US000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           831 CTCTTTTCTTCTC 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 92.3
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14 CTCCTTTCTTCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ABN09923;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    원
```

ö

Gaps

30-JAN-2001;

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to defect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunospens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP-proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as the sequence linears having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The collised sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1; in particular heart cand skeletal muscle disorders. hGDMLP-1 may be used for diagnosing a collynucleotide sequence in the exemplification of the present invention. N.B. C The present sequence for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO cat fig. at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                    New polypeptide, for raising antibodies that recognize hGDWLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDWLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                            Shannon ME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6053.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.4; DB 1; Length 17; 2.3%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1; Indels
                                                                                          Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 1 A; 7 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                          Rank DR,
                                                                                                                                                                                                                                                             Disclosure; SEQ ID NO 9915; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 7.4e
                                                                                        Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .061/c
ABN06061 standard; DNA; 17 BP.
  05-FEB-2001; 2001US-0266860P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        26-MAY-2000; 2000US-0207456P.
21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          703 TCCAGCGAGTCCC 715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              29-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 rccreceaerccc 15
                                                                                     Ji Y, Penn SG,
                                          (AEOM~) AEOMICA INC.
                                                                                                                              WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABN06061;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1043
                                                                                     Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABN06061,
```

à 임

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polymucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 mucleic acids can be used as probes to detect, characterise and quantify nucleic acids can be used as probes to detect, characterise and quantify provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for capture as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The compute associated with the expression of hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart comparate and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence data for this patent did not form part of the printed comparation, but was obtained in electronic format directly from WIPO at the wine and an electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                               New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart;
muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease;
skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10681.
                                                                                                                                                                                                                                                                                                                       Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 17; 22.3%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                     Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 7 A; 1 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                     Hanzel DK, Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 6053; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ftp.wipo.int/pub/published_pct_sequence
                                                        30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABN10689 standard; DNA; 17 BP.
                     2001WO-US000661.
2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          831 CTCTTTTCTTCTC 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13 CTCCTTTCTTCT 1
                                                                                                                                                                                                                                                                                                                Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                       (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                   30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABN10689;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABN10689
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
```

ó

ABN10690;

```
New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                           Disclosure; SEQ ID NO 10681; 214pp; English
                                                                  2000US-0207456P.
2000US-0234687P.
2000US-0236359P.
                                                                                                     2001WO-US000661.
                                                                                                           2001WO-US000662.
2001WO-US000663.
                                                                                                                             2001WO-US000664.
                                                                                                                                    30-JAN-2001; 2001WO-US000665.
                                                                                                                                                     2001WO-US000667.
                                                                                                                                                               30-JAN-2001; 2001WO-US000668.
                                                                                                                                                                      30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
                                                  25-MAY-2001; 2001WO-US016981
                                                                                            2000GB-00024263
                                                                                                                                             30-JAN-2001; 2001WO-US000666.
                                                                                                                                                                                       05-FEB-2001; 2001US-0266860P
                                                                                                                                                                                                                         Penn SG,
                                                                                                                                                                                                                                         WPI; 2002-179446/23.
                                                                                                                                                                                                        (AEOM-) AEOMICA INC.
                 WO200192524-A2.
                                                                                                                                                                                                                        Ji Y,
                                                                                                                            30-JAN-2001;
                                                                                                     30-JAN-2001;
                                                                                                             30-JAN-2001;
                                                                                                                     30-JAN-2001;
                                                                                                                                                      30-JAN-2001;
Homo sapiens
                                                                                           04-OCT-2000;
                                                                                   27-SEP-2000;
                                 06-DEC-2001
                                                                                                                                                                                                                       Gu Y,
```

Shannon ME;

Chen W,

Rank DR,

Hanzel DK,

The protein I (hGDMLD-1). The protein and polymorlectide sequences of hGDMLD-1 can be used in gene therapy and vaccine production. The hGDMLD-1 can be used in gene therapy and vaccine production. The hGDMLD-1 can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as specifically recognise hGDMLP-1 proteins, as specifically of hGDMLP proteins, as specifically as and/or amount specifically of hGDMLP proteins, as specifically as the concentration and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for having specific deficiency in hGDMLP-1 production and in vaccines or for replacement therapy. The production, and in vaccines or for having a disorder associated with the expression of hGDMLP-1, in particular heart disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. from WIPO The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from The present invention describes a human genome-derived myosin-like ftp.wipo.int/pub/published_pct_sequence

Sequence 17 BP; 5 A; 6 C; 4 G; 2 T; 0 U; 0 Other;

```
0
3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                  92.3%;
                                                                              928 CCACCTCCAGAG 940
Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
```

0

Gaps

ABN10690 standard; DNA; 17 BP. RESULT 1045 ABN10690

ccacccrcaagag 17

2

Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss. Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10682. 10-JAN-2001; 2001WO-US000667. 10-JAN-2001; 2001WO-US000668. 10-JAN-2001; 2001WO-US000669. 2001WO-US000665. 2001WO-US000666. 25-MAY-2001; 2001WO-US016981 2000US-0234687P 2000US-0236359P 2001WO-US000664 2001WO-US000670 30-JAN-2001; 2001WO-US000670 05-FEB-2001; 2001US-0266860P 2000GB-00024263 2001WO-US000662 2001WO-US000663 2001WO-US000661 (first entry) WO200192524-A2. 26-MAY-2000; 04-OCT-2000; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 10-JAN-2001; 30-JAN-2001; 30-JAN-2001; Homo sapiens, 27-SEP-2000; 29-MAY-2002 21-SEP-2000; 06-DEC-2001. 

Shannon ME; Chen W, Rank DR, Hanzel DK, Gu Y, Ji Y, Penn SG,

WPI; 2002-179446/23.

(AEOM-) AEOMICA INC

New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.

Disclosure; SEQ ID NO 10682; 214pp; English.

protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP advorance in proteins, as specifically recognise hGDMLP and/or amount specifically of hGDMLP proteins, as specific blomolecule and/or amount specifically of hGDMLP proteins, as specific blomolecule and/or amount specifically of hGDMLP proteins, as specific blomolecule capture probes for surface-enhanced laser desorption ionisation, as therefore a second in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence in the exemplification of the present invention. N.B. The sequence data for this patient did not form part of the printed specification, but was obtained in electronic format directly from WIPO at the wipo.int/pub/published_pct_sequence The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1

Sequence 17 BP; 4 A; 6 C; 5 G; 2 T; 0 U; 0 Other;

Query Match

3.9%; Score 11.4; DB 1; Length 17;

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 (can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunospens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser description ionisation, as therapoutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a
                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                Gaps
                                                                                                                                                                                                                                                                    Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10685.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shannon ME;
                                ..
                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Chen W,
Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; SEQ ID NO 10685; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DK,
                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hanzel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001MO-US00663.

2001MO-US00664.

2001MO-US000663.

2001MO-US000665.

2001MO-US000665.

2001MO-US000666.

2001MO-US000666.

2001MO-US000669.

2001MO-US000669.
                                                                                                                                                                          ABN10693 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2000US-0207456P
                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0236359P
              92.3%;
                                                              928 CCACCCTCCAGAG 940
                                                                                                                                                                                                                                     (first entry)
                                                                                 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2002-179446/23.
                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                             WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-0CT-2000)
30-JAN-2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ji Y,
                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-FEB-2001;
                                                                                                                                                                                                                                      29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                            06-DEC-2001
                                                                                                                                                                                                       ABN10693;
                                                                                                                                         RESULT 1046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gu Y,
                                Matches
                                                                                                                                                           ABN10693
                                                                                                                                                                                        à
```

```
.;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The present invention describes a human genome-derived myosin-like protein I (hGDWLP-1). The protein and polynucleotide sequences of hGDWLP-1 can be used in gene therapy and vaccine production. The hGDWLP-1 nucleic acids can be used as probes to detect, characterise and quantify
disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence date for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        odies that recognize hGDMLP-1 proteins, probes for surface-enhanced laser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9914.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shannon ME;
                                                                                                                                                                                                  ;
                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chen W,
                                                                                                                                   Seguence 17 BP; 5 A; 7 C; 4 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New polypeptide, for raising antibodies that
or as specific biomolecula carrier ----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure, SEQ ID NO 9914; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rank
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-0CT-2000; 2000GB-00024263.
30-73A-2001; 2001W0-US000661.
30-73A-2001; 2001W0-US000663.
30-73A-2001; 2001W0-US0006663.
30-73A-2001; 2001W0-US0006664.
30-73A-2001; 2001W0-US0006665.
30-73A-2001; 2001W0-US0006667.
30-73A-2001; 2001W0-US0006667.
                                                                                                                                                                                                                                                                                                                                               ABN09922 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US000670
2001US-0266860P
                                                                                                                                                                                                                                 928 CCACCCTCCAGAG 940
                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                 12; Conservative
                                                                                                                                                                                                                                                                1 ccacccrcaagag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (AEOM-) AEOMICA INC
                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gu Y, Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                 29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               06-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                 ABN09922;
                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                  RESULT 1047
                                                                                                                                                                                                 Matches
 88888888888
                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                  à
```

```
provide initial substrates for the recombinant engineering of hopping protein variants having desired phenotypic improvements, and for expressing the proteins. The hopping improvements, and for used as immunogens to raise antibodies that specifically recognise hopping and/or amount specifically of hopping proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hopping therapeutic supplement in patients having specific deficiency in hopping production, and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The productive supplement the expression of hobMLP-1 may be used for diagnosing a disorder associated with the expression of hobMLP-1, in particular heart of standard sequence represents an oligomer used in the screening of the hobMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed
                                                                                                                                                                                                                                                                            specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10683.
hGDMLP-1 nucleic acids in samples, as amplification substrates, to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Chen W,
                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 2 A; 6 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ABN10691 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001; 2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001; 2001WO-US000668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAY-2000; 2000US-0207456P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001; 2001WO-US000661.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2001WO-US000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-FEB-2001; 2001US-0266860P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                  703 TCCAGCGAGTCCC 715
                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity 92.3<sup>3</sup>
watches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTGCGAGTCCC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-179446/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200192524-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ji Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    06-DEC-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABN10691;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1048
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $$$$$$$$$$$$$$$$$$$$$$$$$$$
                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 임
```

ö

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 proteins.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
              New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                 production, and in vaccines or for replacement therapy. The displacement control of the production and in vaccines or for replacement therapy. The displacement associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9913.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 11.4; DB 1; Length 17;
Pred. No. 7.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 4 A; 7 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                          Disclosure; SEQ ID NO 10683; 214pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAY-2001; 2001WO-US016981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000US-0234687P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0236359P.
2000GB-00024263.
2001WO-US000661.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000664.
2001WO-US000665.
2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABN09921 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     928 CCACCCTCCAGAG 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3 CCACCCTCAAGAG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27-SEP-2000;
04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                26-MAY-2000;
21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     06-DEC-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABN09921;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABN0992
ð
```

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be respectively amount specifically of hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                               New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6050.
                                                                                                                                                                 Shannon ME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1; Indels
                                                                                                                                                                 Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 2 A; 7 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4; DB 1;
Pred. No. 7.4e+02;
                                                                                                                                                                 Hanzel DK, Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                    Disclosure; SEQ ID NO 9913; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABN06058 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             25-MAY-2001; 2001WO-US016981.
                 30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US00669.
30-JAN-2001; 2001WO-US00670.
05-FEB-2001; 2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%;
2001WO-US000667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      703 TCCAGCGAGTCCC 715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    29-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5 rccreceaerccc 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 92.3
nes 12; Conservative
                                                                                                                                                                   Penn SG,
                                                                                                                                                                                                        WPI; 2002-179446/23.
                                                                                                                       (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens.
                                                                                                                                                                 Ji Y,
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      06-DEC-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABN06058;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1050
                                                                                                                                                                     Bu Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABN06058/
  ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
```

0

Gaps

., 0

```
The present invention describes a human genome-derived myosin-like

protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-

c can be used in gene therapy and vaccine production. The hGDMLP-1

c nucleic acids can be used as probes to detect, characterise and quantify

c hGDMLP-1 nucleic acids in samples, as amplification substrates, to

hGDMLP-1 nucleic acids for the recombinant engineering of hGDMLP-1

c provide initial substrates for the recombinant engineering of hGDMLP-1

protein variants having desired phenotypic improvements, and for

expressing the proteins. The hGDMLP-1 proteins or polypeptides may be

cc expressing the proteins as standards in assays used to determine the concentration

cused as immunogens to raise antibodies that specifically recognise hGDMLP-1

candor amount specifically of hGDMLP proteins, as specific biomolecule

capture probes for surface-enhanced laser desorption ionisation, as

therapeutic supplement in patients having specific deficiency in hGDMLP-1

c production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

production, and in vaccines or for replacement therapy. The

coptucted associated with the expression of hGDMLP-1 in particular heart

cond skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22.

The present sequence represents an oligomer used in the screening of the

CT he sequence data for this patent did not form part of the printed

cyclication, but was obtained in electronic format directly from MIPO

cyclication, but was obtained in electronic format directly from MIPO

cyclication and an expression of hGDMLP-1 format directly from MIPO

cyclication and production 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser descrption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:6051.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1; Length 17; 12.3%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; SEQ ID NO 6050; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                 Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                 2000GB-00024263.
2001WO-US000661.
                                                                                                                               2001WO-US000662.
2001WO-US000663.
                                                                                                                                                                            2001WO-US000664
                                                                                                                                                                                                  2001WO-US000665.
2001WO-US000666.
                                                                                                                                                                                                                                               2001WO-US000667.
2001WO-US000668.
                                                                                                                                                                                                                                                                                          30-JAN-2001; 2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  92.3%;
                                                                                                                                                                                                                                                                                                                                          2001US-0266860P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABN06059 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     831 CTCTTTTCTCTC 843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-MAY-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity 92.3
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 crecrirerrere 4
                                                                                                                                                                                                                                                                                                                                                                                                                                   Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                        (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2002-179446/23.
                                                                                                                               30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                 Gu Y, Ji Y,
                                                                                                                                                                                                                                               30-JAN-2001;
                                                                                 04-OCT-2000;
30-JAN-2001;
                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                          05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABN06059;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABN06059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              XEXEX
ò
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
```

ö

```
Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                     21-SEP-2000; 2000US-0234687P.
27-SEP-2000; 2000US-0236359P.
04-OCT-2000; 2000GB-00024263.
                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US00665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001WO-US000668.
2001WO-US000669.
                                                                                                                                                                                                                                                             25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000670
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001US-0266860P
                                                                                                                                                        WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                             26-MAY-2000;
                                                                                                                                                                                                          06-DEC-2001
```

## (AEOM-) AEOMICA INC

Shannon ME; Chen W, Rank DR, Hanzel DK, Gu Y, Ji Y, Penn SG, WPI; 2002-179446/23.

New polypeptide, for raising antibodies that recognize hGDWLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.

Disclosure; SEQ ID NO 6051; 214pp; English

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynuclectide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 collect acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired henotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunospens to raise antibodies that specifically recognise hGDMLP-1 proteins, as specific biomolecule and/or amount specifically of hGDMLP-1 proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production associated with the expression of hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1 and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this parent did not form part of the printed specification, but was obtained in electronic format directly from WIPO ftp.wipo.int/pub/published_pct_sequence

Sequence 17 BP; 7 A; 2 C; 6 G; 2 T; 0 U; 0 Other;

```
3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels
                    92.3%;
                                                                              831 CICITITICITCIC 843
                                        12; Conservative
                                                                                                                  15 crecrirerrere 3
                                        Matches
```

Best Local Similarity

Query Match

ó

Gaps

;

Human, genome-derived myosin-like protein 1; GDWLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; Bkeletal muscle disorder; amplicon; screening; ss. Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9917. Shannon ME; Chen W, Rank DR, Hanzel DK, ABN09925 standard; DNA; 17 BP 2001WO-US000663. 2001WO-US000664. 2001WO-US000667. 2001WO-US000668. 2001WO-US000669. 2001WO-US000665. 2001WO-US000666. 2000US-0236359P 2001WO-US000661 2001WO-US000662 2001WO-US000670 25-MAY-2001; 2001WO-US016981 2000GB-00024263 2001US-0266860P Ji Y, Penn SG, (AEOM-) AEOMICA INC. WO200192524-A2. Homo sapiens. 04-OCT-2000; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 30-JAN-2001; 05-FEB-2001; 29-MAY-2002 06-DEC-2001 27-SEP-2000; ABN09925; Gu Y, ABN09925 

New polypeptide, for raising antibodies that recognize hGDWLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1. WPI; 2002-179446/23.

Disclosure; SEQ ID NO 9917; 214pp; English.

The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids used may probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and the proteins. and/or amount specifically of McDMLP proteins, as specific blomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence

X Q

ð gg

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27-SEP-2000;
04-OCT-2000;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-FEB-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAY-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             06-DEC-2001.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                        ABN08913;
                                                                                                                                                                                                                                                                                                                                                            RESULT 1054
                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                             ABN08913
                                                                                                                                                                                                                                                                                                                                                                                                                         555555555555X8
                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                            d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polymucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration and/or amount specifically of hGDMLP proteins, as specific blomolecule
                                                                               ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                          Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                               Gaps
                                                                                                                                                                                                                                                                                                              Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:10684.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shannon ME;
                                                                               .;
0
                                          Score 11.4; DB 1; Length 17;
Pred. No. 7.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chen W,
                   Sequence 17 BP; 1 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; SEQ ID NO 10684; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hanzel DK,
                                                                                                                                                                                                                        ABN10692 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2000US-0207456P.
2000US-0234687P.
2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000GB-00024263.
2001WO-US000661.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000670
2001US-0266860P
                                                  3.9%;
                                                                                                              703 TCCAGCGAGTCCC 715
                                                                                                                                                                                                                                                                                    (first entry)
                                  Query Match
Best Local Similarity 92...
Best Local 2; Conservative
                                                                                                                                           1 TCCTGCGAGTCCC 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200192524-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-SEP-2000;
27-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    04-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001;
                                                                                                                                                                                                                                                                                    29-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        06~DEC-2001
                                                                                                                                                                                                                                                       ABN10692;
                                                                                                                                                                                            RESULT 1053
                                                                                                                                                                                                           ABN10692
```

```
ó
capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The polynucleotide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders. hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the The sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New polypeptide, for raising antibodies that recognize hGDMLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDMLP-1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shannon ME;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:8905.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Chen W,
                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 4 A; 7 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rank DR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 8905; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Hanzel DK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABN08913 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000663.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2001WO-US000670.
2001US-0266860P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2000US-0234687P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2000US-0236359P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000GB-00024263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US000661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001WO-US000662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001WO-US000664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001WO-US000668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001WO-US000669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAY-2001; 2001WO-US016981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        928 CCACCTCCAGAG 940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCACCCTCAAGAG 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gu Y, Ji Y, Penn SG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2002-179446/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (AEOM-) AEOMICA INC.
```

Shannon ME;

Chen W,

Rank DR,

Hanzel DK,

Ji Y, Penn SG,

Gu Y,

WPI; 2002-179446/23.

New polypeptide, for raising antibodies that recognize hGDWLP-1 proteins, or as specific biomolecule capture probes for surface-enhanced laser desorption ionization, comprises human myosin-like protein hGDWLP-1.

```
The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 mucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1 protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunogens to raise antibodies that specifically recognise hGDMLP-1 proteins, as standards in assays used to determine the concentration andor amount specifically of hGDMLP proteins, as specific biomolecule capture probes for surface-enhanced laser desorption ionisation, as therapeutic supplement in patients having specific deficiency in hGDMLP-1 capturelectide sequences encoding hGDMLP-1 may be used for diagnosing a disorder associated with the expression of hGDMLP-1, in particular heart of sequence expresents an oligomer used in the screening of the hGDMLP-1 sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at the view, in family and in view of the present invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    at ftp.wipo.int/pub/published_pct_sequence
```

```
Gaps
                                                                                                        0
                                               Query Match
3.9%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.4e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
Sequence 17 BP; 3 A; 8 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                  708 CGAGTCCCAGGAG 720
                                                                                                                                                                                                  4 CGAGTCCCAGCAG 16
                                                                                                                                                  ð
```

ABN09924 standard; DNA; 17 BP. (first entry) 29-MAY-2002 ABN09924; RESULT 1055 ABNO 9924
XX
AC
AC
XX
AC
XX
AC
XX
DT
Z9-1
XX
XX
M
HUM:
XX
M
WO2
XX
XX
M
WO2
XX
XX
PN
PF
Z5XX
PN
PF
Z1PR

Human; genome-derived myosin-like protein 1; GDMLP-1; hGDMLP-1; heart; muscle; myosin; chromosome 22; gene therapy; vaccine; heart disease; skeletal muscle disorder; amplicon; screening; ss. Human GDMLP-1 17-mer scanning SEQ ID NO:5 sequence SEQ ID NO:9916.

Homo sapiens.

WO200192524-A2.

06-DEC-2001.

25-MAY-2001; 2001WO-US016981

2000US-0207456P 2000US-0234687P 21-SEP-2000;

27-SEP-2000; 2000US-0236359P.
04-OCT-2000; 2000GB-00024263.
30-JAN-2001; 2001WO-US000661.
30-JAN-2001; 2001WO-US000662.
30-JAN-2001; 2001WO-US000663.

30-JAN-2001; 2001WO-US000665

30-JAN-2001, 2001WO-US000666. 30-JAN-2001, 2001WO-US000667 30-JAN-2001, 2001WO-US000668. 30-JAN-2001, 2001WO-US0006669. 30-JAN-2001; 2001WO-US000670 05-FEB-2001; 2001US-0266860P

2000US-0236359P. 2000GB-00024263. 2001WO-US000661.

27-SEP-2000; 04-OCT-2000; 21-SEP-2000;

30-JAN-2001; 2001WO-US000661 30-JAN-2001; 2001WO-US000662 30-JAN-2001; 2001WO-US000663

(AEOM-) AEOMICA INC

```
protein variants having desired phenotypic improvements, and for expressing the proteins. The hGDMLP-1 proteins or polypeptides may be used as immunospens to raise antibodies that specifically recognise hGDMLP upoteins, as specifically recognise hGDMLP proteins, as specifically recognise hGDMLP or and/or amount specifically of hGDMLP proteins, as specific biomolecule and/or amount specifically of hGDMLP proteins, as specific biomolecule contents probes for surface-enhanced laser desorption ionisation, as therefore probes for surface-enhanced laser desorption ionisation, as therefore the propes for surface-enhanced laser desorption ionisation, as therefore a specific deficiency in hGDMLP-1 production, and in vaccines or for replacement therapy. The production, and in vaccines or for replacement therapy. The production and in vaccines or for replacement therapy. The production as secured with the expression of hGDMLP-1, in particular heart and skeletal muscle disorders, hGDMLP-1 is localised to chromosome 22. The present sequence represents an oligomer used in the screening of the hGDMLP-1 sequence in the exemplification of the present invention. N.B. The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO of the wipo int/pub/published_pct_sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ò
                                                                                                                                                                                                                                    The present invention describes a human genome-derived myosin-like protein 1 (hGDMLP-1). The protein and polynucleotide sequences of hGDMLP-1 can be used in gene therapy and vaccine production. The hGDMLP-1 nucleic acids can be used as probes to detect, characterise and quantify hGDMLP-1 nucleic acids in samples, as amplification substrates, to provide initial substrates for the recombinant engineering of hGDMLP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, KTOMla, KTOMl; kidney tumour overexpressed membrane, cytostatic,
gene therapy, cancer; kidney, liver, bone marrow, brain, heart, lung,
kidney, colon; skeletal muscle, testis, uterus, placenta, probe, ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 1 A; 7 C; 3 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human KTOM1a portion (ABQ63232) probe # 728.
                                                                                                                                                                                             Disclosure; SEQ ID NO 9916; 214pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABQ64015 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21-SEP-2001; 2001WO-US029656.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       703 TCCAGCGAGTCCC 715
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20-AUG-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2 rccreceaerccc 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200224750-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-MAR-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABQ64015;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABQ64015
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              엄
```

28-AUG-2001;

Zhang J;

```
New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic acids encoding the protein, useful for treating subjects having defects in KTOM1 which can manifest as cancer of the kidney, or as a disorder of e.g., liver or bone.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel isolated nucleic acid encoding human KTOMI (kidney turmour overexpressed membrane) protein. The protein of the tinvention has cyrostatic activity. The nucleotide may have a use in gene therapy. The KTOMI nucleic acids may be used to diagnose, treat or monitor a disease caused by altered expression of human KTOMI. Occupositions comprising the nucleic acids, proteins or antibodies may be used to treat subjects having defects in KTOMI which can manifest as cancer of the kidney, as well as a disorder of liver, bone marrow, brain, heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta function. The sequence represents a probe used in the invention to scan the nt 1-1001 portion of human KTOMIa (ABQ63232)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pesticidal; spraying; dusting; broadcasting; seed coating; insect pest; Colorado potato beetle; western corn rootworm; southern corn rootworm; insect target range; endotoxin; Cry1218; PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 5 A; 2 C; 5 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bacillus thuringiensis 3' forward PCR primer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (DUPO ) DU PONT DE NEMOURS & CO E I.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; Page 253; 418pp; English.
                                                                                     30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
23-MAY-2001; 2001WO-US006670.
23-MAY-2001; 2001US-00864761.
28-AUG-2001; 2001US-0315676P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABK87254 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    24-OCT-2000; 2000US-0242838P.
23-OCT-2001; 2001US-00032717.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-OCT-2001; 2001WO-US045468
                                          2001WO-US000665.
2001WO-US000666.
2001WO-US000667.
2001WO-US000663.
2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-OCT-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   789 TCTGGTGCCAAGA 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 TTTGGTGCCAAGA 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bacillus thuringiensis.
                                                                                                                                                                                                                                                       (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                           WPI; 2002-479509/51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WO200234774-A2
                                             30-JAN-2001;
                                                                     30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABK87254;
                                                                                                                                                                                                                                                                                                     Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABK87254/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                     New human kidney tumor overexpressed membrane (KTOM1) protein and nucleic acids encoding the protein, useful for treating subjects having defects in KTOM1 which can manifest as cancer of the kidney, or as a disorder of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      The invention relates to a novel isolated nucleic acid encoding human KTOM1 (kidney tumour overexpressed membrane) protein. The protein of the invention has cytostatic activity. The nucleotide may have a use in gene therapy. The KTOM1 nucleic acids may be used to diagnose, treat or monitor a disease caused by altered expression of human KTOM1. Compositions comprising the nucleic acids, proteins or antibodies may be used to treat subjects having defects in KTOM1 which can manifest as cancer of the kidney, as well as a disorder of liver, bone marrow, brain, heart, lung, kidney, colon, skeletal muscle, testis, uterus and placenta function. The sequence represents a probe used in the invention to scan the nt 1-1001 portion of human KTOM1a (ABQ631232)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; KTOM1a; KTOM1; kidney tumour overexpressed membrane; cytostatic; gene therapy; cancer; kidney; liver; bone marrow; brain; heart; lung; kidney; colon; skeletal muscle; testis; uterus; placenta; probe; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 11.4; DB 1; Length 17; pred. No. 7.4e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 4 A; 2 C; 6 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human KTOM1a portion (ABQ63232) probe # 727.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 2; Page 253; 418pp; English
                          30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABQ64014 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-SEP-2000; 2000US-0236359P.
04-0CT-2000; 2000GB-0024283.
30-JAN-2001; 2011WO-US000661.
30-JAN-2001; 2011WO-US000662.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-SEP-2001; 2001WO-US029656.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%;
         2001WO-US000664
                                                                                                                                                                                            2001US-0315676P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     789 TCTGGTGCCAAGA 801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20-AUG-2002 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 92...
Best Local 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 Trrggreccaaga 13
                                                                                                                                                                                                                                                                                                                            WPI; 2002-479509/51.
                                                                                                                                                                                                                                                                                                                                                                                                                                               e.g., liver or bone.
                                                                                                                                                                                                                                         (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WO200224750-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21-SEP-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
```

28-MAR-2002

ABQ64014;

RESULT 1057 ABQ64014

ð g

ö

Gaps

; 0

1; Indels

```
Human, gene therapy, tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human HTPL scanning oligonucleotide SEQ ID 454.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABV79208 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
23-MAY-2001; 2001US-00864761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001; 2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-JAN-2002; 2002EP-00001167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001; 2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             09-OCT-2001; 2001US-0327898P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-JAN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EP1229046-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            07-AUG-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABV79208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1059
ABV79208/C
XX
AC ABV79208
XX
DT 03-JAN-:
XX
C Human H:
XX
C Human H:
XX
C Human H:
XX
C Human G
C Homo Sa
XX
C Homo Sa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
```

The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L, (L for long). HTPL shares an overall structure organisation with the Patched protein. The shares an overall structure organisation with the Patched protein. The shared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumnour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome loppi2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of the stop and in the social associated with decreased expression or activity of human HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potential therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL. Example 2; Page 123; 718pp; English à d ·, ppraying, dusting, broadcasting, or seed coating, where the insect pest is selected from Colorado potato beetle, western corn rootworm or southern corn rootworm. The invention is also useful for increasing insect target range and for producing transgenic microorganisms and plants that express the pesticidal polypeptide. The invention is also useful for producing transformed plants and in transforming any organism to produce the pesticidal polypeptide of the invention. The present nucleic acid sequence represents a PCR primer that was used in the methods of the invention to amplify a Bacillus thuringiensis Cry1218 pesticidal polypeptide useful for impacting insect pest e.g. Gaps invention is useful for impacting an insect pest by applying the the molecules of the invention to the environment of the insect pest by present invention relates to a new pesticidal polypeptide. The ·, Sims LE; Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 1; Indels Kahn TW, Sequence 17 BP; 7 A; 1 C; 6 G; 3 T; 0 U; 0 Other; Flannagan RD, 0; Mismatches Disclosure; Page 12; 176pp; English. Feng X, Query Match Best Local Similarity 92.3%; 970 CTCTAAATCTGGT 982 12; Conservative 4 Colorado potato beetle. CTCTAAATCTTGT WPI; 2002-519178/55 New isolated endotoxin 16 Abad AR, Query Match

. 0 Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss. Gaps ; Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 1; Indels Sequence 17 BP; 2 A; 4 C; 7 G; 4 T; 0 U; 0 Other Human HTPL scanning oligonucleotide SEQ ID 453. 0; Mismatches ABV79207 standard; DNA; 17 BP 2001WO-US000664. 2001WO-US000665. 2001WO-US000667. 2001WO-US000668. 3.9%; 28-JAN-2002; 2002EP-00001167. 2001WO-US000663 2001US-00864761 2001US-0327898P 781 GCAGCCCCTCTGG 793 03-JAN-2003 (first entry) Query Match 3.9 Best Local Similarity 92.3 Matches 12; Conservative ~ (AEOM-) AEOMICA INC 30-JAN-2001; 30-JAN-2001; 23-MAY-2001; EP1229046-A2. Homo sapiens. 30-JAN-2001; 09-OCT-2001; 30-JAN-2001; 30-JAN-2001; 07-AUG-2002. ABV79207; RESULT 1060 

Zhan J;

WPI; 2002-676582/73

(AEOM-) AEOMICA INC

```
30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000668.
23-MAY-2001; 2001WO-US000669.
23-MAY-2001; 2001WS-0:3864761.
                                                                                                                                                                                                                                                                   28-JAN-2002; 2002EP-00001167
                                                                                                                                                                                                                                                                                                                  (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                  EP1229046-A2.
                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                                                                                           07-AUG-2002
                                                                                                                                                                                         ABV79206;
                                                                                                                                                                        RESULT 1061
                                                                                                                                                                             ABV79206/c
à
                                                                                                                                                                                      g
```

```
WPI; 2002-676582/73.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABV79205;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                   The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein. The shares an overall structure organisation with the Patched protein. The shares an overall structure strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is composed to human chromosome loppia. HTPL and its coding sequence are usapped to human chromosome loppia. HTPL and its coding sequence are usapped to human chromosome loppia. HTPL and is reading sequence are usapped to manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of therapy and manufacture of a medicament for treatment or prevention of the TPL. Such disorders include disorders of testis, or adrenal, adult and cottail inver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscie or colon function. HTPL proteins and mucleic acids are clinically useful diagnostic markers and potenial therapeutic acids are male infertility and caneer. The present oligonucleotide was used in an example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .
0
                                                                       Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٥;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 11.4; DB 1; Length 17;
Pred. No. 7.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 2 A; 4 C; 8 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human HTPL scanning oligonucleotide SEQ ID 452.
                                                                                                                                                                                                                                                             Example 2; Page 123; 718pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABV79206 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781 GCAGCCCCTCTGG 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          03-JAN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match, 3.9
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               15 gcadccccrcrag 3
WPI; 2002-676582/73.
```

```
The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABB98519 to ABB98520). HTPL consists with a few single base pair differences between the two isoforms, with a few single base pair differences a premature stop two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL canared structural features strongly imply that HTPL plays a role similar to that of Patched, and is a potential tumour suppressor. HTPL is consequent in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10p12.1 HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in theraped to human chromosome 10p12.1 HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in the such disorders include disorders of testis, or adrenal, adult and there is bone matrow, brain, kidney, placente, prostate, called all inver, bone matrow, brain, kidney, placente, prostate, called in infertility and cancer. The present oligonucleotide was used in an angel of the state 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                      Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; gene therapy; tumour suppressor; HTPL; chromosome 10p12.1; human testis expressed Patched like protein; testis; adrenal; liver; male germ cell development; bone marrow; brain; kidney; lung; placenta; prostate; skeletal muscle; colon; male infertility; cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; rative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 2 A; 4 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human HTPL scanning oligonucleotide SEQ ID 451.
                                                                                                                                                                                                       Example 2; Page 123; 718pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000668.
2001WO-US000669.
2001US-00864761.
2001US-0327898P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000664.
2001WO-US000665.
2001WO-US000667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-JAN-2002; 2002EP-00001167.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ABV79205 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            example from the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781 GCAGCCCTCTGG 793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-JAN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 GCAGCCCTCTAG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EP1229046-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          09-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-AUG-2002.
Zhan J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #X#X####XXX999999999999999
```

```
WPI; 2002-676582/73.
(AEOM-) AEOMICA INC
  Zhan J;
```

Novel isolated human testis expressed Patched like protein (HTPL), useful for identifying agonist and antagonist and specific binding partners, and for treating subjects having defects in HTPL.

Example 2; Page 122; 718pp; English

The present invention relates to human testis expressed Patched like protein (HTPL, see ABV78759 to ABV78762 and ABB98519 to ABB98520). HTPL has two isoforms, with a few single base pair differences between the two. One of the single base pair changes introduces a premature stop codon in HTPL-S (S for short) compared to HTPL-L (L for long). HTPL shares an overall structure organisation with the Patched protein The to that of Patched, and is a potential tumour suppressor. HTPL is important in regulating male germ cell development, and the HTPL gene was mapped to human chromosome 10pl2.1. HTPL and its coding sequence are useful for diagnosing a disorder caused by mutation in HTPL, and in therapy and manufacture of a medicament for treatment or prevention of such disorder associated with decreased expression or activity of human suppression. HTPL. Such disorders include disorders of testis, or adrenal, adult and foetal liver, bone marrow, brain, kidney, lung, placenta, prostate, skeletal muscle or colon function. HTPL proteins and nucleic acids are clinically useful diagnostic markers and potenial therapeutic agents for male infertility and cancer. The present oligonucleotide was used in an example from the invention

Sequence 17 BP; 2 A; 5 C; 7 G; 3 T; 0 U; 0 Other;

```
Gaps
                                     ö
3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
               Local Similarity 92.3
les 12; Conservative
 Query Match
                              Matches
```

ö

781 GCAGCCCCTCTGG 793 17 GCAGCCCCTCTAG à g

ABK18229 standard; RNA; 17 BP

RESULT 1063

ABK18229;

09-APR-2002 (first entry)

Human ERG hammerhead ribozyme target sequence, Seq ID No 876.

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; amberzyme 

Homo sapiens.

WO200188124-A2

22-NOV-2001.

16-MAY-2001; 2001WO-US015866

16-MAY-2000; 2000US-00572021

RIBOZYME PHARM INC. GLAXO GROUP LID. (RIBO-) (GLAX )

Randi AM; Mclaughlin F, Mcswiggen JA, Jarvis T, Von Carlowitz I,

WPI; 2002-082995/11.

Novel polynucleotide which down regulates expression of Ets-related gene, useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 74; 149pp; English.

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, tumour angiogenesis, diabetic retinopathy, macular degeneration, tumour angiogenesis, diabetic retinopathy, macular degeneration, culgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge velgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge weber syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. Leukaemia or tumour angiogenesis is treated by administering (I) to the patient in conjunction with one or more of other therapies such as radiation or chemotherapy treatment. (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent coll consumbly as mach as maded of ERG RNA in a coll. (I) is useful for specifically cated to the expression of ERG, and as diagnostic tool to the presence of ERG RNA in a cell. (I) is useful for specifically cargeting genes that share homology with ERG gene or ERG fusion genes. ABK17354-ABK22719 represent nucleic acids, including antisense and cargariance of the presence of examine of the expression of ERG, and a cargaring genes has enabered cards, including antisense and cargariance of the presence of examine of the expression of ERG, and cargaring genes has enabered caids, including antisense and cargariance of the presence of examine of the expression of ERG, and a cargaring genes has enabered caids, including antisense and cargariance of the presence of examine of the expression of ERG fusion genes. related PCR primers of the invention

Sequence 17 BP; 2 A; 12 C; 2 G; 0 T; 1 U; 0 Other;

Gaps .; 0 3.9%; Score 11.4; DB 1; Length 17; 84.6%; Pred. No. 7.48+02; ive 1; Mismatches 1; Indels Local Similarity 84.6 es 11; Conservative Query Match Best Loc Matches

ö

926 CACCACCTCCAG 938

à

2 ccccacccuccae 14

RESULT 1064 ABK18937

BP. ABK18937 standard; RNA; 17

ABK18937;

(first entry) 09-APR-2002

Human ERG DNAzyme target sequence Seq ID No 1584.

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay.Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; amberzyme

Homo sapiens.

WO200188124-A2 

```
Novel polymucleotide which down regulates expression of Ets-related gene, useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
                                                                                                                             Claim 4; Page 105; 149pp; English.
                    16-MAY-2001; 2001WO-US015866.
                                  16-MAY-2000; 2000US-00572021
                                                                    Jarvis I, Von Carlowitz I,
                                                (RIBO-) RIBOZYME PHARM INC
                                                        (GLAX ) GLAXO GROUP LTD.
                                                                                    WPI; 2002-082995/11.
       22-NOV-2001.
```

```
The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERC). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, neavascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca ungaris, angiofibroma of tuberous sclerosis, port wine stains, Sturge weber syndrome, Nippel-Trenaunay Weber syndrome, Osler-Weber-rendu cyndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies the treatment. The method comprises the use of one or more therapies conditions suitable for the treatment. Leukaemia or tumour conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or cell, by contacting the cell with (I) (I) is useful for cleaving RNA of ERG gene, by contacting (I) with RNA, in the presence of a divalent cation such as Mg2+. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to expression of ERG, and as diagnostic tool to expression of ERG, and as diagnostic tool to the presence of ERG RNA in a cell. (I) is useful for specifically chargement mucleic acid molecules which regulate expression of ERG, and cargeting genes that share homology with ERG gene or ERG fusion genes. ABK1334-ABK22719 represent nucleic acids, including antisense and cargeted profession of ERG, and expression o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.4; DB 1; Length 17; 11.5%; Pred. No. 7.4e+02; ve 4; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 3 A; 3 C; 6 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match 3.9%;
Best Local Similarity 61.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           816 CAGGGTTGGCTGT 828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
```

```
CAGGAUUGGCUGU 17
      dd
```

ö

```
Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Bahing's Sarcoma; melanoma; psoriasis; tumour angiogenesis; viabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing;
                                                                                                                                                       Human ERG hammerhead ribozyme target sequence, Seq ID No 874.
                                    ABK18227 standard; RNA; 17 BP
                                                                                                                     (first entry)
                                                                                                                     09-APR-2002
                                                                              ABK18227;
RESULT 1065
                   ABK1822
```

```
amberzyme.
```

```
useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.
Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss;
Osler-Weber-rendu syndrome; leukaemia; osteoporosis; DNAzyme; inozyme;
                                                                                                                                              Randi AM;
                                                                                                                                                                             Novel polynucleotide which down regulates expression of Ets-related
                                                                                                                                              Mclaughlin F,
                                                                                                                                             Von Carlowitz I, Mcswiggen JA,
                                                                                                                                                                                                                 Claim 4; Page 74; 149pp; English.
                                                                                                     16-MAY-2000; 2000US-00572021.
                                                                                     16-MAY-2001; 2001WO-US015866.
                                                                                                                     (RIBO-) RIBOZYME PHARM INC. (GLAX ) GLAXO GROUP LTD.
                                                                                                                                                               WPI; 2002-082995/11.
                                                     WO200188124-A2.
                                      Homo sapiens.
                                                                      22-NOV-2001
                                                                                                                                                Jarvis T,
```

Randi AM;

Mclaughlin F,

Mcswiggen JA,

The invention relates to a nucleic acid molecule (I) which down regulates corporate and the invention relates to a nucleic acid molecule (I) is useful for treating capperssion of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, maculat degeneration, and and and accordance to neovascular glaucoma, myopic degeneration, arthritis, psoriasis, verruca vulgaris, angiofibroma of tubercous sclerosis, port-wine stains, Sturge weber syndrome, leukaemia, osteoporosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies the treatment. In the method comprises the use of one or more therapies conditions suitable for the treatment. Leukaemia or tumour angionation with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as mg2+. (I) is useful for relacing Boachiet to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically createsing genes that share homology with ERG gene or ERG fusion genes cargeting genes that share homology with ERG gene or ERG fusion genes certains means of the invention includes including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and as diagnostic or or or enzymatic nucl the invention related PCR primers of

```
Gaps
                                              ·.
                       3.9%; Score 11.4; DB 1; Length 17; 4.6%; Pred. No. 7.4e+02;
                                             Indels
Sequence 17 BP; 2 A; 10 C; 4 G; 0 T; 1 U; 0 Other;
                                               1; Mismatches
                                                                                                                                                     ABK18230 standard; RNA; 17 BP
                                    84.68;
                                                                      926 CACCACCCTCCAG 938
                                                                                                                                                                                                 (first entry)
                 Query Match
Best Local Similarity 84.69
                                                                                          5 ccccacccuccag 17
                                                                                                                                                                                                 09-APR-2002
                                                                                                                                                                          ABK18230;
                                                                                                                                RESULT 1066
                                                                                                                                            ABK18230
                                                                                                                                                                EXEXEXE
EXEXEXE
                                                                         ð
                                                                                              g
```

Human ERG hammerhead ribozyme target sequence, Seq ID No 877.

ó

Human; hammerhead ribozyme; cytostatic; antitumour; antidiabetic; ophthalmological; antiarthritic; antipsoriatic; virucide; osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis; tumour angiogenesis; diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; leukaemia; ss; Osler-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; amberzyme.

Homo sapiens.

WO200188124-A2.

22-NOV-2001

16-MAY-2001; 2001WO-US015866.

16-MAY-2000; 2000US-00572021.

(RIBO-) RIBOZYME PHARM INC. (GLAX ) GLAXO GROUP LTD.

Randi AM Mclaughlin F, Mcswiggen JA, Von Carlowitz I, WPI; 2002-082995/11. Jarvis T,

Novel polynucleotide which down regulates expression of Ets-related gene, useful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 74; 149pp; English.

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, tumour angiogenesis, diabetic retinopathy, macular degeneration, tumour angiogenesis, diabetic retinopathy, macular degeneration, verruca tumour angiogenesis, diabetic retinopathy, macular degeneration, verruca vulgaris, angiofibroma of tuberous sclerosis, port-wine stains, Sturge CW Meber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-rendu for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies the treatment. The method comprises the use of one or more themaple for the treatment. Leukaemia or tumour conjunction with one or more of tother therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or call, by contacting (I) is useful for reducing ERG activity in a cell, by contacting the cell with (I). (I) is useful for oditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically transfers and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically carged and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically carged and enzymatic nucleic acid molecules which regulate expression of ERG, and cargumatic nucleic acid molecules which regulate expression of ERG, and car

Sequence 17 BP; 2 A; 12 C; 1 G; 0 T; 2 U; 0 Other;

Gaps 0; Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 1; Indels 1; Mismatches 3.98; 84.68; Query Match 3.9 Best Local Similarity 84.6 Matches 11; Conservative

. 0

926 CACCACCTCCAG 938

ò

CCCCACCCCCAG 13

RESULT 1067 ABK18228

ABK18228 standard; RNA; 17 BP

09-APR-2002 (first entry)

Human ERG hammerhead ribozyme target sequence, Seq ID No 875.

Human, hammerhead ribozyme, cytostatic, antitumour, antidiabetic, ophthalmological; antiarthritic; antipsoriatic; virucide, osteopathic; vulnerary; cancer; lymphoma; Ewing's sarcoma; melanoma; psoriasis, tumour angiogenesis, diabetic retinopathy; macular degeneration; neovascular glaucoma; myopic degeneration; arthritis; verruca vulgaris; angiofibroma of tuberous sclerosis; port-wine stain; wound healing; Sturge Weber syndrome; Kippel-Trenanay-Weber syndrome; siper-Weber-rendu syndrome, leukaemia; osteoporosis; DNAzyme; inozyme; amberzyme.

Homo sapiens.

WO200188124-A2.

22-NOV-2001.

16-MAY-2001; 2001WO-US015866.

16-MAY-2000; 2000US-00572021

(RIBO-) RIBOZYME PHARM INC. (GLAX ) GLAXO GROUP LTD

Mclaughlin F, Jarvis T, Von Carlowitz I, Mcswiggen JA,

Randi AM;

WPI; 2002-082995/11.

Novel polynucleotide which down regulates expression of Ets-related genuseful for treating cancer, diabetic retinopathy, macular degeneration, arthritis, psoriasis, verruca vulgaris and Sturge Weber syndrome.

Claim 4; Page 74; 149pp; English.

The invention relates to a nucleic acid molecule (I) which down regulates expression of an Ets-related gene (ERG). (I) is useful for treating conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, conditions selected from cancer, lymphoma, Ewing's sarcoma, melanoma, tumour angiogenesis, diabetic retinopathy, macular degeneration, the angiogenesis, diabetic retinopathy, macular degeneration, culturis, psoriasis, verruca (tumour angiogenesis, diabetic degeneration, arthritis, psoriasis, verruca (tumour angiofibroma of tuberous sclerosis, port-wine stains, Sturge (Weber syndrome, Leukaemia, osceoprosis and wound healing. (I) is useful for treating a patient having a condition associated with the level of ERG, by contacting cells of the patient with (I) under conditions suitable for the treatment. The method comprises the use of one or more therapies of the treatment. The method comprises the use of one or more therapies of under conditions suitable for the treatment. Leukaemia or tumour condituction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or conjunction with one or more of other therapies such as radiation or cell, by contacting (I) is useful for reducing ERG activity in a cell. (I) is useful for diagnosis of conditions and diseases related to the expression of ERG, and as diagnostic tool to examine genetic drift and mutations within diseased cells or to detect the presence of ERG RNA in a cell. (I) is useful for specifically carging enable that share homology with ERG gene or ERG fusion genes. ARK1334-ABK22719 represent nucleic acids, including antisense and enzymatic nucleic acid molecules which regulate expression of ERG, and enzymatic nucleic acid molecules with in regulate expression of ERG, and enzymatic nucleic acid molecules with regulate expression of ERG, and enzymatic nucleic acid molecules acids, including antisense and enzymatic nucleic acid molecules acids including antisense and enzymatic nucleic acid m

Sequence 17 BP; 2 A; 12 C; 2 G; 0 T; 1 U; 0 Other;

Gaps ., 3.9%; Score 11.4; DB 1; Length 17; 34.6%; Pred. No. 7.4e+02; ve 1; Mismatches 1; Indels ilarity 84.6%; Conservative Query Match
Best Local Similarity
""" 11; Conserva

;

CACCACCCTCCAG

926

ð

```
Sequence 17 BP; 9 A; 1 C; 5 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                           Disclosure; Page 23; 117pp; English.
                           ABK95592 standard; DNA; 17 BP.
                                                                                                                     10-DEC-2001; 2001WO-GB005460.
                                                                                                                               08-DEC-2000; 2000GB-00030038.
                                               24-SEP-2002 (first entry)
CCCCACCCCCAG 15
                                                                                                                                        (SEPT-) SEPTEGEN LTD
                                                                                                                                                           WPI; 2002-508557/54.
                                                                                                                                                                                                                                                                                                         of the invention
                                                                                                  WO200246369-A2
                                                                                                           13-JUN-2002
                                                                               primer; ss.
                                                                                         Synthetic
    m
                                     ABK95592;
                                                                                                                                                                                   reporter
                                                                                                                                                 Davey J;
                  RESULT 1068
                       ABK95592,
                                     g
```

```
The invention relates to a Schizosaccharomyces pombe yeast cell (I)

comprising: (a) a heterologous G-Protein Coupled Receptor (GPCR)-

regulated signaling pathway (P1) which is dereptessed during mitotic

phase of cell growth; and (b) a reporter system (RS) for reporting signal

mediated by P1, where RS has reporter gene (G1) operatively linked to

promoter (PR), which is regulatable by GPCR, and G1 and PR is E

comprising an sxa2 promoter, or its homologue or analogue, operatively

comprising an sxa2 promoter, or its homologue or analogue, operatively

linked to an exogenous reporter gene; (2) an isolated polymucleotide

(IIb) encoding a Galpha-transplant having a mucleotide sequence from

Galphad, Galphad, and Galphale. (1), (IIa) or (IIb) is useful for

studying GPCR-regulated activity, for determining the effect of a

compound on GPCR-regulated activity, for introducing the compound, to (I)

and noting the output of RS, where the compound affects the ability of

compound on GPCR-regulate RS. Purthermore (I) is useful for identifying a

regulator or a mutant of a component of GPCR-regulated pathway and for

continuation and activity of the compound affects the ability of the compound and activity of the compound affects the ability of and noting the output of RS, where the compound affects the ability of and orphan GPCR regulated pathway and for regulator or a mutant of a component of GPCR-regulated pathway and for the contain a seagent that modilates GPCR-regulated pathway and for the contains and activity of the contains and activity of the contains and activity of the activity of the contains and activity of the contains and activity of the component of GPCR-regulated pathway and for the contains and activity of the con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New Schizosaccharomyces pombe cell, useful for studying G-protein coupled receptor-regulated activity, comprises receptor-regulated signaling pathway that is derepressed during cell growth mitotic phase and
                                                                                                                                                     Yeast, G-Protein Coupled Receptor; GPCR-regulated signaling pathway;
GPCR; sxa2 promoter; Galpha-transplant; Galphaq; Galphas; Galphao;
Galphai2; Galphai3; Galphaz; Galpha12; Galpha13; Galpha14; Galpha16; PCR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             by producing a random peptide within (I) and measuring an amount of reporter activity produced. ABK95570-ABK95608 represent Galpha-transplant coding sequences and related coding sequences and PCR primers
Yeast G-protein coupled receptor transplant Galpha, PCR primer #3.
```

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSH1) polypeptide (I), comprising a sequence of 730 amino acids (SI), ABB83999), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSH1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family Small GTPases as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and mucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSH11 including diagnosing and creating caused by altered expression of human evolupement of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or
                                                                                                                                                                                                                                                        Human; POSH1 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Example 2; SEQ ID NO 1955; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                       scanning oligonucleotide SEQ ID NO 1955.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 2 A; 0 C; 11 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001WO-US000665.
2001WO-US000666.
2001WO-US000667.
2001WO-US000668.
2001WO-US000669.
                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001WO-US000670.
2001US-00864761.
                                                                                                                                                                                                                                                                                                   gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-JAN-2002; 2002EP-00001165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10-OCT-2001; 2001US-0328205P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001WO-US000664
                                                                                                                ABV91242 standard; DNA; 17
                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             activity of human POSHL1.
11| |||||||||
14 TGTCTCTCTTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2002-684061/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                             EP1239051-A2.
                                                                                                                                                                                                                             Human POSHL1
                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                          23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                              11-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shannon M;
                                                                                                                                                     ABV91242;
                                                                               RESULT 1069
                                                                                                 ABV91242,
                                                                                                                                                     a
```

0

Gaps

ö

1; Indels

0; Mismatches

Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02;

3.9%;

Query Match 3.99
Best Local Similarity 92.33
Matches 12; Conservative

```
ö
                                                                                                                           Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine;
Gaps
0;
Indels
                                                                                                             Human POSHL1 scanning oligonucleotide SEQ ID NO 202.
۲;
Mismatches
·,
                                                                                                                                                                                                                         30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US0006770.
23-MAY-2001; 2001WS-00864761.
                                                                ABV89489 standard; DNA; 17 BP
                                                                                                                                          gene therapy; transgenic; ss.
                                                                                                                                                                                                     28-JAN-2002; 2002EP-00001165
                                                                                                                                                                                                                    2001WO-US000663
             920 CATCACCACCACC 932
                                                                                              (first entry)
12; Conservative
                            15 CATCTCCACCACC 3
                                                                                                                                                                                                                                                                                                    (AEOM-) AEOMICA INC
                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                   30-JAN-2001;
30-JAN-2001;
                                                                                              23-DEC-2002
                                                                                                                                                                      EP1239051-A2
                                                                                                                                                                                      11-SEP-2002
                                                                               ABV89489;
                                                  RESULT 1070
Matches
                                                        g
```

Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL -1, useful for treating disorders associated with decreased expression or activity of human POSHL1. Example 2; SEQ ID NO 202; 60pp + Sequence Listing; English.

WPI; 2002-684061/74

Shannon M;

treating cancer, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSH, 1) polypeptide (1), comprising a sequence of 730 amino acids (S1, ABBB3999), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL I is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHLI including diagnosing and treating cancer, they useful in the development of vaccines and (II) is Derwent by the European Patent Office

Sequence 17 BP; 4 A; 6 C; 3 G; 4 T; 0 U; 0 Other;

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (1), comprising a sequence of 730 amino acids (S1, ABB83999), a sequence having 618 sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) conciding (1) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL including diagnosing and creating cancer, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligomiclectide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to
                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL -1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                  Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                    Gaps
                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 2; SEQ ID NO 1120; 60pp + Sequence Listing; English.
Length 17;
                                  Indels
                                                                                                                                                                                                                                                                                                 Human POSHL1 scanning oligonucleotide SEQ ID NO 1120.
Score 11.4; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 1;
                                                                                                                                                                                            ABV90407 standard; DNA; 17 BP.
3.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000664.
2001WO-US000665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US000666.
2001WO-US000667.
2001WO-US000668.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2001MO-US000668.
30-JAN-2001; 2001MO-US000669.
30-JAN-2001; 2001MO-US000670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001US-00864761.
2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                      transgenic; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28-JAN-2002; 2002EP-00001165
                                                                   751
                                                                                                                                                                                                                                                                (first entry)
                                  Conservative
                                                                   739 ACTIGGTAGGGTC
                                                                                                    16 ACATGGTAGGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-684061/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (AEOM-) AEOMICA INC
                Local Similarity
les 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                     gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                        EP1239051-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
                                                                                                                                                                                                                                                                23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shannon M;
                                                                                                                                                                                                                             ABV90407;
Query Match
                                                                                                                                                      RESULT 1071
                                  Matches
                                                                                                                                                                        ABV90407
                                                                                                  셤
                                                                                                                                                                                                             ₽
```

SXS

g à

```
RESULT 1073
                                                                                                                                      Best Loc
Matches
                                                                                                                                                                                                                                                                                            ABV89490/
                                                                                                                                                                                                                                                                                                                              8866688
                                                                                                                                                                                        à
                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSH1 1) polypeptide (I), comprising a sequence of 730 amino acids (SI, ABBH399), a sequence having 65% sequence identity to (S1), (S1), having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSH1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful cor identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSH1 including disease and training caused by altered therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The
                                                                                                   ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL -1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                                                                              Human, POSHL 1, SH3 domain, POSH-like signalling protein 1; oncogene;
Rho GTPase; signal transduction, gene expression, cancer; vaccine;
                                                                                                       Gaps
                                                                                                     ..
                                                                 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Example 2; SEQ ID NO 201; 60pp + Sequence Listing; English.
                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                 Human POSHL1 scanning oligonucleotide SEQ ID NO 201.
                                                                                                       1;
                                Sequence 17 BP; 3 A; 5 C; 8 G; 1 T; 0 U; 0 Other;
                                                                                                     0; Mismatches
Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         30-JAN-2001; 201W0-US000664.
30-JAN-2001; 2001W0-US000665.
30-JAN-2001; 2001W0-US000666.
30-JAN-2001; 2001W0-US000667.
30-JAN-2001; 2001W0-US000669.
                                                                                                                                                                                                                                                             ABV89488 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001, 2001WO-US000668.
30-JAN-2001, 2001WO-US000669.
30-JAN-2001, 2001WO-US0006670.
30-JAN-2001, 2001US-0US0670.
10-OCT-2001, 2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                                                                       transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-JAN-2002; 2002EP-00001165.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2001WO-US000663
                                                                                                                                         748 GGTCCCAGGGTCC 760
                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                      GGCCCAGGGTCC 13
                                                                                                       12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-684061/74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (AEOM-) AEOMICA INC
                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                       gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EP1239051-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-SEP-2002,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shannon M;
                                                                                                                                                                          Н
                                                                                                                                                                                                                                                                                                ABV89488;
                                                                    Query Match
                                                                                                                                                                                                                              1072
                                                                                                                                                                                                                                               ABV89488/c
                                                                                                       Matches
```

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL -1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (SI), ABBB3999), a sequence having 65% sequence identity to (SI), (SI) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene-product that functions as an adaptor protein that interacts with Rho family small GTPasses as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnosing and treating cancer, they useful in the development of vaccines and (II) is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                            .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 2; SEQ ID NO 203; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                    Length 17;
                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human POSHL1 scanning oligonucleotide SEQ ID NO 203.
                                                                                                                                                     Sequence 17 BP; 5 A; 6 C; 2 G; 4 T; 0 U; 0 Other,
                                                                                                                                                                                                              Score 11.4; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000667.
2001WO-US000668.
2001WO-US000669.
2001WO-US00670.
2001US-00864761.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABV89490 standard; DNA; 17 BP.
                                                                                                                                                                                                           3.9%;
Local Similarity 92.3%;
tes 12; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2001WO-US000663.
2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US000666.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28-JAN-2002; 2002EP-00001165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001US-0328205P
                                                                                                                                                                                                                                                                                                                                           739 ACTTGGTAGGGTC 751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                   17 ACATGGTAGGGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2002-684061/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001;
30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JAN-2001;
30-JAN-2001;
23-MAY-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11-SEP-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABV89490;
                                                                                                                                                                                                                       Query Match
```

ö

. 0

```
useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to berwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                                                                                          Human, POSHL 1; SH3 domain, POSH-like signalling protein 1; oncogene, Rho GTPase; signal transduction, gene expression, cancer, vaccine,
                                                                                                                                                                       Gaps
                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Example 2; SEQ ID NO 1954; 60pp + Sequence Listing; English.
                                                                                                                                         3.9%; Score 11.4; DB 1; Length 17; 12.3%; Pred. No. 7.4e+02;
                                                                                                                                                                     1; Indels
                                                                                                                                                                                                                                                                                                                                                                                Human POSHL1 scanning oligonucleotide SEQ ID NO 1954.
                                                                                                             Sequence 17 BP; 3 A; 6 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                     0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
23-MAY-2001; 2001WS-00864761.
                                                                                                                                                                                                                                                                                               ABV91241 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                       gene therapy; transgenic; ss.
                                                                                                                                                       92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-JAN-2002; 2002EP-00001165
                                                                                                                                                                                               739 ACTIGGIAGGGTC 751
                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                     Conservative
                                                                                                                                                                                                                         ACATGGTAGGGTC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-684061/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (AEOM-) AEOMICA INC
                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                     23-DEC-2002
                                                                                                                                                                     12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-SEP-2002
                                                                                                                                                                                                                         15
                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                        ABV91241;
                                                                                                                                                                                                                                                                 Matches
88866666888
                                                                                                                                                                                                Š
```

The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSH1 1) polypeptide (1), comprising a sequence of 730 amino acids (SI, ABB83999), a sequence having 65% sequence identity to (SI), (SI) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small Grasses as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II)

```
encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHIJ including diagnosing and treating cancer, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL) polypeptide (I), comprising a sequence of 730 amino acids (SI, ABB83999), a sequence having 65% sequence identity to (SI), (SI) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 2; SEQ ID NO 205; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human POSHL1 scanning oligonucleotide SEQ ID NO 205.
                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 2 A; 1 C; 10 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                   Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          30-JAN-2001; 2001MO-US000665.
30-JAN-2001; 2001MO-US000666.
30-JAN-2001; 2001MO-US000667.
30-JAN-2001; 2001MO-US0006697.
30-JAN-2001; 2001MO-US000669.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001WO-US000663.
2001WO-US000664.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23-MAY-2001; 2001US-00864761.
10-OCT-2001; 2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABV89492 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            920 CATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CATCTCCACCACC 4
                                                                                                                                                                                                                                                                                                                                                                                                         Ouery Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2002-684061/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-JAN-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABV89492;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1075
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV89492,
      THE STATE OF THE S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            à
```

```
adaptor protein that interacts with Rho family small CTPases as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human PoSHLi including diagnosing and treating cancer, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oll-gonucleotide useful in examples of the invention. Note: The present sequence did not form part of the printed specification, but is based on sequence information supplied to berwent by the European Patent Office
```

Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels Sequence 17 BP; 4 A; 6 C; 4 G; 3 T; 0 U; 0 Other; Query Match 3.9%; Best Local Similarity 92.3%; Matches 12; Conservative 739 ACTIGGIAGGIC 751

;

Gaps ;

> BP. ABV91243 standard; DNA; 17 23-DEC-2002 (first entry) 13 ACATGGTAGGGTC 1 ABV91243; RESULT 1076 ABV91243/c à g

Human, POSHL 1, SH3 domain, POSH-like signalling protein 1, oncogene, Rho GTPase, signal transduction, gene expression, cancer, vaccine, Human POSHL1 scanning oligonuclectide SEQ ID NO 1956. gene therapy; transgenic; ss. 

Homo sapiens.

EP1239051-A2.

11-SEP-2002.

28-JAN-2002; 2002EP-00001165

30-JAN-2001; 2001WO-US000663. 30-JAN-2001; 2001WO-US000665. 30-JAN-2001; 2001WO-US000665. 30-JAN-2001; 2001WO-US000667. 30-JAN-2001; 2011WO-US000667. 30-JAN-2001; 2011WO-US000668. 30-JAN-2001; 2011WO-US000669.

2001US-00864761 2001US-0328205P 23-MAY-2001; 10-OCT-2001;

(AEOM-) AEOMICA INC

Shannon M;

WPI; 2002-684061/74.

Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.

Example 2; SEQ ID NO 1956; 60pp + Sequence Listing; English.

Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL -1, useful for treating disorders associated with decreased expression or activity of human POSHL1.

Example 2; SEQ ID NO 204; 60pp + Sequence Listing; English

The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABB83999), a sequence having 65% sequence identity to (S1),

```
tragment of the sequences comprising at least 8 contiguous amino acids.

Tragment of the sequences comprising at least 8 contiguous amino acids.

Human POSHL 1: a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as commons.

Commonstream components of the signal transduction pathway. (I) is useful as concoling (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnosing and treating cancer, they useful in the development of vaccines and (II) is treating cancer, they useful in the development of vaccines and (II) is caseful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The construction sequence is that of a scanning oligomolectide useful in examples of the invention. Note: The present sequence did not form part of the privant by the European Patent Office
                                                                                                                                                                                                                                                                                                                                       .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human, POSHL 1, SH3 domain, POSH-like signalling protein 1, oncogene;
Rho GTPase; signal transduction, gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                     3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human POSHL1 scanning oligonucleotide SEQ ID NO 204.
                                                                                                                                                                                                                                                                          Sequence 17 BP; 2 A; 0 C; 11 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABV89491 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001WO-US000667.
2001WO-US000668.
2001WO-US000669.
2001WO-US000670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001WO-US000664.
2001WO-US000665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-MAY-2001; 2001US-00864761.
10-OCT-2001; 2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-JAN-2002; 2002EP-00001165.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001WO-US000666
                                                                                                                                                                                                                                                                                                                                                                        920 CATCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                           12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                    14 CATCTCCACCACC 2
                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-684061/74.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
30-JAN-2001; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EP1239051-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11-SEP-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV89491;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1077
                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABV89491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                                                                                                                                                                                                                                                                                        d
```

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (SI, MBBA399), a sequence having 65% sequence identity to (SI), (SI) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPases as well as downstream components of the signal transduction pathway. (I) is useful of for identifying a specific binding partner. (I) and nucleic acids (II) cenceding (I) are useful for diagnosing, monitoring disagnosing and caused by altered expression of human POSHL1 including diagnosing and caused by altered expression of human POSHL1 including diagnosing and treating cancer, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did nor form part of the Derwent by the Buropean Patent Office
```

Sequence 17 BP; 4 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

```
.
3.9%; Score 11.4; DB 1; Length 17; 12.3%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels
           92.3%;
                                                     739 ACTIGGIAGGGIC 751
                          12; Conservative
                                                                            14 ACATGGTAGGGTC 2
            Local Similarity
 Query Match
                         Matches
                                                    à
                                                                            g
```

ő

Gaps

ABV91240 standard; DNA; 17 BP

ABV91240; RESULT 1078
ABV91240/C
ABV91244
XX
AC ABV91241
XX
DT 23-DEC-:
XX
CONTRACT BENDARY
XX
CONTRACT
XX
CONTR

(first entry) 23-DEC-2002

scanning oligonucleotide SEQ ID NO 1953. Human POSHL1

Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine; gene therapy; transgenic; ss.

Homo sapiens

EP1239051-A2.

11-SEP-2002.

28-JAN-2002; 2002EP-00001165

30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000666.
30-JAN-2001; 2001WO-US000667.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
23-MAY-2001; 2001WS-US000670.

(AEOM-) AEOMICA INC

Shannon M;

WPI; 2002-684061/74.

Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABB83999), a sequence having 65% sequence identity to (S1), (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an adaptor protein that interacts with Rho family small GTPsses as well as downstream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) caused by altered expression of human POSHL1 including diagnosing and treating cancer, they useful in the development of vaccines and (II) is useful in gene therapy. (II) is useful for constructing microarrays which transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the harvant hy the furnnean parent of the construction supplied to harvant hy the furnnean parent of the construction supplied to
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene;
Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ..
             Example 2; SEQ ID NO 1953; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human POSHL1 scanning oligonucleotide SEQ ID NO 1957.
                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 2 A; 2 C; 9 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                               Derwent by the European Patent Office
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV91244 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000665.
2001WO-US000666.
2001WO-US000667.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000669.
30-JAN-2001; 2001WO-US000670.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-JAN-2002; 2002EP-00001165.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-MAY-2001; 2001US-00864761.
10-OCT-2001; 2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001WO-US000664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                920 CATCACCACCACC 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                              12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2002-684061/74.
                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AEOM-) AEOMICA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EP1239051-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               30-JAN-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-SEP-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABV91244;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1079
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ношо
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABV91244/
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ਨੇ
```

```
Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL -1, useful for treating disorders associated with decreased expression or
                                                               -1, useful for treating dactivity of human POSHL1.
```

Example 2; SEQ ID NO 1957; 60pp + Sequence Listing; English.

The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABB83999), a sequence having 65% sequence identity to (G1), (C2) whaving 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene/oncogene product that functions as an edaptor protein that interacts with Rho family small GrPases as well as commistream components of the signal transduction pathway. (I) is useful for identifying a specific binding partner. (I) and nucleic acids (II) for identifying a specific binding partner. (I) and nucleic acids (II) consided by altered expression of human POSHL1 including diagnosing and crasting caused by altered expression of human POSHL1 including diagnosing and crasting are useful for measuring and for surveying gene expression and creating cransgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of the invention. Note: The present sequence did not form part of the convention, but is based on sequence information supplied to between by the Buropean Patent Office

Sequence 17 BP; 2 A; 0 C; 11 G; 4 T; 0 U; 0 Other;

Gaps ; Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; Indels 0; Mismatches 3.9%; 12; Conservative Query Match Best Local Similarity Matches

920 CATCACCACC 932 13 CATCTCCACCACC δ g

ABX04724 standard; DNA; 17 BP. 1080 RESULT

(first entry) 15-JAN-2003 Human endogenous retrovirus k (herv-k) associated probe #88.

Human, endogenous retrovirus, herv, prostate cancer; testicular cancer; multiple sclerosis; insulin-dependent diabetes mellitus; HML-2 protease; cancer; transgenic animal; probe; ss.

Human endogenous retrovirus.

WO200246477-A2.

13~JUN-2002.

07-DEC-2001; 2001WO-US047824

07-DEC-2000; 2000US-0251830P. 07-DEC-2001; 2001US-00016604.

CHIR ) CHIRON CORP.

Escobedo J; Williams LT, Hardy SF, WPI; 2002-691475/74. Garcia P,

Claim 18; Page 151; 152pp; English

The invention describes novel isolated polypeptides (I, Ib) useful for Novel isolated polypeptides useful for diagnosis of prostate cancer.

diagnosing prostate cancer comprising obtaining a patient sample containing prostate cells and detecting the presence or absence of an expression product of a HWL-2 endogenous retrovirus in a patient sample. Polymucleotides associated with (I) are useful for diagnosis or treatment of testicular cancer, multiple sclerosis or insulin-dependent diabetes mellitus. An inhibitor of a HWL-2 protease and a transdominant negative mutant of HML-2 CORF are also useful in the manufacture of a medicament for treating prostate cancer. (I) and (Ib) are useful for generating antibodies specific to the polypeptides associated with cancer, as targets for therapeutic intervention, and in immunising a transgenic animal. This sequence represents a probe used for detecting the presence of human endogenous retrovirus (herv) of the HML-2 sub-group in prostate

Sequence 17 BP; 6 A; 5 C; 3 G; 3 T; 0 U; 0 Other;

Gaps .. 3.9%; Score 11.4; DB 1; Length 17; llarity 92.3%; Pred. No. 7.4e+02; Conservative 0; Mismatches 1; Indels Local Similarity nes 12; Conserv Query Match Best Loca Matches

; 0

ð q RESULT 1081 ABK57459/c

ABK57459 standard; RNA; 17

BP.

(first entry) 02-JUL-2002 ABK57459;

; 0

Human CLCAl gene enzymatic nucleic acid #1830.

antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; cysque therapy; bronchodilator; corticosteroid; vaccination; mucokinetic; acetylcysteine. chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; 

Homo sapiens.

WO200211674-A2.

14-FEB-2002

09-AUG-2001; 2001WO-US024970.

09-AUG-2000; 2000US-0224383P.

(RIBO-) RIBOZYME PHARM INC. (SYNT ) SYNTEX USA LLC. (THOM/) THOMPSON J.

Szymkowski DE; Ayers D, Mckenzie T, Mcswiggen J, Thompson J, Grupe A;

WPI; 2002-217145/27.

Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.

Claim 4; Page 113; 152pp; English.

The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibroais, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or

```
tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygan therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an enzymatic nucleic acid molecule of the invention
                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 5 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
          885666666666688
```

```
Gaps
                                       .
0
         3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels
                      92.3%;
                                                             814 CICAGGGTTGGCT 826
Query Match
Best Local Similarity 92.35
Matches 12; Conservative
                                                                                      CTCAGAGTTGGCT 4
                                                                                      16
                                                            à
                                                                                     염
```

```
ABK56764 standard; RNA; 17 BP.
    ABK56764;
RESULT 1082
 ABK56764/
```

Human CLCAl gene enzymatic nucleic acid #1135.

(first entry)

02-JUL-2002

Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;

acetylcysteine

Homo sapiens.

WO200211674-A2

14-FEB-2002.

09-AUG-2001; 2001WO-US024970.

09-AUG-2000; 2000US-0224383P.

(RIBO-) RIBOZYME PHARM INC.

SYNTEX USA LLC. THOMPSON J. THOM/)

Szymkowski DE; Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Grupe

WPI; 2002-217145/27.

Enzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.

Claim 4; Page 80; 152pp; English.

The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises

the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetyloysteine and mucokinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCAI RNA in a cell. This sequence represents an enzymatic nucleic acid molecule of the invention 888888888

Sequence 17 BP; 6 A; 4 C; 5 G; 0 T; 2 U; 0 Other;

```
Gaps
                            0;
    DB 1; Length 17;
                            Indels
  Score 11.4; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 1
                          0;
   3.9%;
Query Match 3.9
Best Local Similarity 92.3
Matches 12; Conservative
```

ö

814 CTCAGGGTTGGCT 826 Ŋ 17 CTCAGAGTIGGCT

셤 8

ABK56082 standard; RNA; 17 RESULT 1083 ABK56082, 

BP.

02-JUL-2002 (first entry)

ABK56082;

Human CLCAl gene enzymatic nucleic acid #453.

Human; chloride channel calcium activated 1; CLCAl; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic; acetylcysteine

WO200211674-A2.

14-FEB-2002

09-AUG-2001; 2001WO-US024970.

09-AUG-2000; 2000US-0224383P.

(RIBO-) RIBOZYME PHARM INC.

(SYNT ) SYNTEX USA LLC. (THOM/) THOMPSON J.

Szymkowski DE; Ayers D, Mckenzie T, Mcswiggen J, Thompson J, Grupe A;

WPI; 2002-217145/27.

channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma. Enzymatic polynucleotide that down regulates expression of chloride

Claim 4; Page 61; 152pp; English.

The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are useful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (COPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition hence, are useful for treatment of a patient having a condition the use of one or more therapies unditions suitable for the the use of one or more therapies unditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucokinetic agents. The

00000x8

g δ

```
The invention relates to enzymatic nucleic acid molecules that down regulate expression of chloride channel calcium activated 1 (CLCA1) genes by cleaving RNA derived from the genes. The nucleic acid sequences are by cleaving RNA derived from the genes. The nucleic acid sequences are cueful as pharmaceutical agents for treating conditions such as chronic obstructive pulmonary disease (OPD), chronic bronchitis, asthma, cystic fibrosis, obstructive bowel syndrome and any other diseases or conditions that are related to or will respond to the levels of CLCA1 in a cell or tissue. The sequences are useful for reducing CLCA1 activity in a cell, hence, are useful for treatment of a patient having a condition associated with the level of CLCA1, where the invention further comprises the use of one or more therapies under conditions suitable for the treatment, for example, oxygen therapy, bronchodilators, corticosteroids, antibacterials, vaccinations, acetylcysteine and mucoskinetic agents. The nucleic acids of the invention are also used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of CLCA1 RNA in a cell. This sequence represents an
                                                                                                                                                                                                             ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; chloride channel calcium activated 1; CLCA1; ss; antiasthmatic; antiinflammatory; chronic obstructive pulmonary disease; COPD; asthma; chronic bronchitis; cystic fibrosis; obstructive bowel syndrome; oxygen therapy; bronchodilator; corticosteroid; vaccination; mucokinetic;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bnzymatic polynucleotide that down regulates expression of chloride channel calcium activated gene, useful for treating Chronic obstructive pulmonary disease (COPD), chronic bronchitis and asthma.
                 examine genetic drift and mutations within diseased cells or to detect
the presence of CLCAI RNA in a cell. This sequence represents an
enzymatic nucleic acid molecule of the invention
                                                                                                                                                                                                             Gaps
nucleic acids of the invention are also used as diagnostic tools to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Thompson J, Mcswiggen J, Mckenzie T, Ayers D, Szymkowski DE;
                                                                                                                                                                                                             ..
                                                                                                                                                          Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 7.4e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                   Sequence 17 BP; 6 A; 4 C; 5 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human CLCA1 gene enzymatic nucleic acid #1136.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 4; Page 80; 152pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                             ABK56765 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-AUG-2001; 2001WO-US024970.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-AUG-2000; 2000US-02243B3P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (RIBO-) RIBOZYME PHARM INC. (SYNT ) SYNTEX USA LLC.
                                                                                                                                                                                                                                                              814 CTCAGGGTTGGCT 826
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                        13 Crcadagridger 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-217145/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (THOM/) THOMPSON J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200211674-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acetylcysteine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        02-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         14-FEB-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABK56765;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Grupe A;
                                                                                                                                                                                                                                                                                                                                                                                                       ABK56765,
                                                                                                                                                                                                                                                                                                                                                                                 RESULT
```

```
ö
                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           regression,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   with tunnour suppression or regression, apoptosis or virus resistance. invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tunnour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This sequence represents an isolated nucleic acid sequence associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New nucleic acid sequences associated with tumor suppression, regress apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                              ss; tumour suppressor; antitumour; cytostatic; tumour suppression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
0
                                                                                           .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02;
                                                          Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 7.4e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                         tumour regression, apoptosis, virus resistance, diagnosis; cellular degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 6 A; 5 C; 4 G; 2 T; 0 U; 0 Other;
                              Sequence 17 BP; 7 A; 4 C; 4 G; 0 T; 2 U; 0 Other;
enzymatic nucleic acid molecule of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                Human tumour suppressor sequence #1430.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amson R;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Claim 1; Page 370; 798pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                   ACC52663 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20-JUN-2001; 2001FR-00008139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20-JUN-2001; 2001FR-00008139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC51724 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           977 TCTGGTGTATGGG 989
                                                                                                                           814 CTCAGGGTTGGCT 826
                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 3.9
Best Local Similarity 92.3
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rcrecrerares 4
                                                                                                                                                         14 crcadagrrddcr 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-250498/25.
                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FR2826373-A1.
                                                                                                                                                                                                                                                                                                   27-JUN-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tuijnder M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACC51724;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16
                                                                                                                                                                                                                                                                      ACC52663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1086
ACC51724
                                                                                                                                                                                                         RESULT 1085
                                                                                                                                                                                                                          ACC52663,
                                                                                                                                                                                                                                        g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              à
    SXS
                                                                                                                                à
                                                                                                                                                          g
```

```
(AMSH ) AMERSHAM BIOSCIENCES SV CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2003031621-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-APR-2003
                                                                                                                                                                                                                                                                                                        encoding
                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACA99707;
                            Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACA99707
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                            The
                                                                                                                                                                                                                                                                                                                                          New nucleic acid sequences associated with tumor suppression, regression, apoptosis or virus resistance are useful to diagnose and treat viral disease, development of tumor cells and cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                        with tumour suppression or regression, apoptosis or virus resistance. Invention relates to these sequences or sequences having at least 80% identity to them, and polypeptides encoded by the sequences or polypeptides having 80% identity to the polypeptide sequences. The invention is used to diagnose or treat viral disease or disease characterized by development of tumour cells or cellular degeneration
                                                                                                                                                                                                                                                                                                                                                                                                                           This sequence represents an isolated nucleic acid sequence associated
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour; G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                 .e., cumour suppressor; antitumour; cytostatic; tumour suppression; tumour regression; apoptosis; virus resistance; diagnosis; cellular degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 7 A; 3 C; 4 G; 3 T; 0 U; 0 Other;
                                  Human tumour suppressor sequence #491.
                                                                                                                                                                                                                                                             SA.
                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 153; 798pp; French
                                                                                                                                                                                                                                                          (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                              20-JUN-2001; 2001FR-00008139.
                                                                                                                                                                                                   20-JUN-2001; 2001FR-00008139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              11-OCT-2002; 2002WO-US032599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12-OCT-2001; 2001US-0329000P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACA99711 standard; DNA; 17
        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        909 GATCAGATTATCA 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATCAGATTACCA 13
                                                                                                                                                                                                                                                                                     Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12; Conservative
                                                                                                                                                                                                                                                                                                                 WPI; 2003-250498/25.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003031621-A2
       27-JUN-2003
                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                     Tuijnder M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                       27-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACA99711;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACA9971
```

g à

```
The invention describes an isolated mucleic acid encoding a G protein coupled receptor (GPCR), mutations of which cause cancer, comprising a 225 or 1921 base pair sequence, or their degenerate variants, encoding a 409 residue amino acid sequence, all given in the specification, with or without conservative amino acid substitutions, or complements of the sequence of them. The encoding nucleic acid is not more than 100 kbase in length. The methods and compositions of the present invention are useful for diagnosing, investigating and/or treating disorders associated with aberrant expression or activity of GPCR-A-1, such as tumours and cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The invention describes an isolated nucleic acid encoding a G protein coupled receptor (GPCR), mutations of which cause cancer, comprising a 2225 or 1921 base pair sequence, or their degenerate variants, encoding a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour; G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #200.
                                                                        New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing, investigating and/or treating disorders associated with aberrant expression or activity of GPCR-A-1, such as tumors and cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing, investigating and/or treating disorders associated with aberrant expression or activity of GPCR-A-1, such as tumors and cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ٥;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             human G-protein coupled receptor GPCR-A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 17 BP; 3 A; 2 C; 7 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                               Example 2; SEQ ID NO 228; 156pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; SEQ ID NO 224; 156pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11-OCT-2002; 2002WO-US032599.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12-OCT-2001; 2001US-0329000P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACA99707 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         727 TCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 rcrecrcrracea 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local Similarity 92.3
Matches 12; Conservative
WPI; 2003-381720/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-381720/36.
```

ö

BP.

ACA99708 standard; DNA; 17

RESULT 1090

ACA99708

ACA99708;

TCTGGTCATAGGA 739

727

15

TCTGGTCTTAGGA

m

g ð

```
The invention describes an isolated nucleic acid encoding a G protein coupled receptor (GPCR), mutations of which cause cancer, comprising a 40.25 or 1921 base pair sequence, or their degenerate variants, encoding a 40.9 residue amino acid sequence, all given in the specification, with or without conservative amino acid substitutions, or complements of the sequence of them. The encoding nucleic acid is not more than 100 kbase in length. The methods and compositions of the present invention are useful for diagnosing, investigating and/or traating disorders associated with aberrant expression or activity of GPCR-A-1, such as tumours and cancers. This sequence represents an oligonucleotide used to analyse the gene encoding human G-protein coupled receptor GPCR-A-1
                                                                                                                                                                                                                                                     .
0
409 residue amino acid sequence, all given in the specification, with or without conservative amino acid substitutions, or complements of the sequence of them. The encoding nucleic acid is not more than 100 kbase in length. The methods and compositions of the present invention are useful for diagnosing, investigating and/or treating disorders associated with abscrant expression or activity of GPCR-A-1, such as tumours and cancers. This sequence represents an oligonucleotide used to analyse the gene encoding human G-protein coupled receptor GPCR-A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human, G-protein coupled receptor; GPCR-A-1; cancer; tumour;
G-protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.
                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing, investigating and/or treating disorders associated with aberrant expression or activity of GPCR-A-1, such as tumors and cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #202
                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 2 A; 3 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                           Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 2; SEQ ID NO 226; 156pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (AMSH ) AMERSHAM BIOSCIENCES SV CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11-OCT-2002; 2002WO-US032599.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2001US-0329000P
                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA; 17
                                                                                                                                                                                                                                                                                              727 TCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rcredrcrradea 17
                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-381720/36.
                                                                                                                                                                                                                                       Sest Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                   ACA99709 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003031621-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12-OCT-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-APR-2003
                                                                                                                                                                                                                                                         12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACA99709;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Zhang J;
                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1089
                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                               ACA99709
                                                                                                                                                                                                                                                                                                                                                                                                                                                   88888888888
                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                  g
```

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention describes an isolated nucleic acid encoding a G protein coupled receptor (GPCR), mutations of which cause cancer, comprising a 2255 or 1921 base pair sequence, or their degenerate variants, encoding a 409 residue amino acid sequence, all given in the specification, with or without conservative amino acid substitutions, or complements of the sequence of them. The encoding nucleic acid is not more than 100 kbase in length. The methods and compositions of the present invention are useful for diagnosing, investigating and/or treating disorders associated with aberrant expression or activity of GPCR-A-1, such as tumours and cancers.
                                                                                                                                          G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       This sequence represents an oligomucleotide used to analyse the gene encoding human G-protein coupled receptor GPCR-A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #203.
                                                                                        G-protein coupled receptor GPCR-A-1 analysis oligonucleotide #201
                                                                                                                                                                                                                                                                                                                                                                                                                                           New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing, investigating and/or treating disorders associated with aberrant expression or activity of GPCR-A-1, such as tumors and cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                          coupled receptor; GPCR-A-1; cancer; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 2 A; 4 C; 5 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 2; SEQ ID NO 225; 156pp; English.
                                                                                                                                                                                                                                                                                                                                              (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                               11-0CT-2002; 2002WO-US032599.
                                                                                                                                                                                                                                                                                                                12-OCT-2001; 2001US-0329000P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               727 TCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16
                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTGGTCTTAGGA
                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-381720/36.
                                                                                                                                Human; G-protein
                                                                                                                                                                                                              WO2003031621-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-JUL-2003
                                                              28-JUL-2003
                                                                                                                                                                                                                                              17-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACA99710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACA99710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                Shang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1091
                                                                                                                                                                                Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACA99710
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EX2XEXEX
```

; 0

Gaps

0;

```
The invention describes an isolated nucleic acid encoding a G protein coupled receptor (GPCR), mutations of which cause cancer, comprising a 2225 or 1921 base pair sequence, or their degenerate variants, encoding a 409 residue amino acid sequence, all given in the specification, with or without conservative amino acid substitutions, or complements of the without conservative amino acid substitutions, or complements of the length. The methods and compositions of the present invention are useful for diagnosing, investigating and/or treating disorders associated with aberrant expression or activity of GPCR-A-1, such as tumours and cancers. This sequence represents an oligonucleotide used to analyse the gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; afitsense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                  G-Protein-Agonist; G-Protein-Antagonist; gene therapy; cytostatic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                             New GPCR-A-1 nucleic acid and polypeptide, useful for diagnosing, investigating and/or treating disorders associated with aberrant expression or activity of GPCR-A-1, such as tumors and cancers.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tumour suppression related human fukutin oligo SEQ ID No 515.
Human; G-protein coupled receptor; GPCR-A-1; cancer; tumour;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 7.4e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 encoding human G-protein coupled receptor GPCR-A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 3 A; 2 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                  Example 2; SEQ ID NO 227; 156pp; English
                                                                                                                                                                                                                         (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                          11-OCT-2002; 2002WO-US032599
                                                                                                                                                                                          12-OCT-2001; 2001US-0329000P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2002; 2002WO-IB004208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-2001; 2001FR-00011978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABT34878 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     727 TCTGGTCATAGGA 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rcreercrragea 14
                                                                                                                                                                                                                                                                                                WPI; 2003-381720/36.
                                                                                     WO2003031621-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO2003025175-A2.
                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12-JUN-2003
                                                                                                                         17-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27-MAR-2003
                                                                                                                                                                                                                                                              Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABT34878;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1092
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Db
```

0

```
The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive uncleotides from the 17 mer sequence, a sequence with, after optimal alignment at least 80 % identity to the 17 mer sequence, a sequence that light stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, acids of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, conclaining the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizohrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for disposis and/or prognosis of these compenents of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression con the therapy. This polynucleotide of the invention can be used in gene therapy. This polynucleotide of the invention can be used in gene contained buman fukutin oligonucleotide of the invention can be used in gene contained buman fukutin oligonucleotide of the invention can be used in gene contained buman fukutin oligonucleotide of the invention can be used in gene contained buman fukutin oligonucleotide of the invention can be used in gene contained buman fukutin oligonucleotide of the invention can be used in gene contained to the contained contained to the contained contained to the contained contained contained contained contained conta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.
                                                                                                                                             New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tumour suppression related human fukutin oligo SEQ ID No 3756
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 7 A; 2 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                             Disclosure; Page 94; 720pp; French.
                                                 Tuijnder M;
(MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABT38119 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .7-SEP-2002; 2002WO-IB004208.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2001; 2001FR-00011978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 92.30,
"hes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  909 GATCAGATTATCA 921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             12-JUN-2003 (first entry)
                                                 relerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 GATCAGATTATGA
                                                                                                WPI; 2003-313353/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO2003025175-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ABT38119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABT38119/
à
```

Tuijnder M;

Amson R,

```
WPI; 2003-313353/30.
relerman A,
```

```
The invention relates to a novel isolated 17 mer nucleic acid sequence, c given in the specification, a sequence containing at least 15 consecutive connectodies from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that the corresponding RNA. The novel isolated nucleic of any of them, or the corresponding RNA. The novel isolated nucleic coff any of them, or the corresponding RNA. The novel isolated nucleic coff any of the invention are useful as probes and primers for detecting, identifying addor amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, corresponding the nucleic acids, corresponding the nucleic acids, cells containing the polypeptides, vectors containing the nucleic acids, cells containing the polypeptides, vectors containing the polypeptides are useful for corresponding that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell corporation, specifically cancer but also Alzheimer's disease and corporation and nativodies and and or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and cohoth the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression corporate and antibodies are useful as components.
New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 2 A; 3 C; 3 G; 9 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                    Disclosure; Page 473; 720pp; French.
```

Gaps . 0 Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 7.46+02; 1; Indels 0; Mismatches 952 AGAAGAGCCAAAT 964 12; Conservative Matches à

S 17 AAAAGAGCCAAAT qq

ABT38296 standard; DNA; 17 BP. (first entry) 12-JUN-2003 ABT38296; RESULT 1094 ABT38296 

Tumour suppression related human fukutin oligo SEQ ID No 3933.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens

WO2003025175-A2.

27-MAR-2003.

L7-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M; Amson R, Telerman A,

```
New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
WPI; 2003-313353/30.
```

Disclosure; Page 493; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, cgiven in the specification, a sequence containing at least 15 consecutive given in the specification, a sequence outlain at least 15 consecutive nucleotides from the 17 mer sequence, a sequence that alignment, at least 80 % identity to the 17 mer sequence, a sequence that tybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic caids of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents and for corresponding to production of recombinant polypeptides. Any of the nucleic acids, cply evector or antibodies directed against the polypeptides are useful for vector or antibodies directed against the polypeptides are useful for grean-ention, specifically cancer but also Alzheimer's disease and degeneration, specifically cancer but also Alzheimer's disease and degeneration, analysis of the expression of the 17 mer nucleic acids in continue the polypeptides can also be used to generate antibodies, and chipse the nucleic acid sequences of the invention can be used in gene thersapy. This polypuncleotide sequence represents a tumour suppression contexted human fukutin oligonucleotide of the invention 

Sequence 17 BP; 1 A; 5 C; 3 G; 8 T; 0 U; 0 Other;

Gaps . 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels Matches 12; Conservative Query Match Best Local Similarity

0;

833 CTTTTCTTCTG 845 crrrgcrrcrcrc 17

셤 ð

· 0

ABT36652 standard; DNA; 17 BP. ABT36652; RESULT 1095

12-JUN-2003 (first entry)

Tumour suppression related human fukutin oligo SEQ ID No 2289.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds. XX T X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X B X

Homo sapiens

WO2003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

Tuijnder M; (MOLE-) MOLECULAR ENGINES LAB. Telerman A, Amson R,

WPI; 2003-313353/30.

ABT34831; Query Match RESULT 1096 Matches ABT34831 셤 

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies Disclosure, Page 300, 720pp, French. and transfected cells.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleicates from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that thybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, concurrent of pharmaceuticals for prevention and/or treatment of viral corresponds to the nucleic acids, cells containing the polypeptides, vectors containing the nucleic acids, cells containing the corporation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these containing the bolypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein whim who murlaid acids of the containing the polypeptides and antibodies are useful as components of protein whim who murlaid acids of these tumour suppression chips. The nucleic acid sequences of the invention can be used in therapy. This polynucleotide sequence represents a tumour suppress related human fukutin oligonucleotide of the invention

Sequence 17 BP; 6 A; 2 C; 4 G; 5 T; 0 U; 0 Other;

Gaps .; 0 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.46+02; ive 0; Mismatches 1; Indels 12; Conservative Local Similarity

ABT34831 standard; DNA; 17 BP

(first entry) 12-JUN-2003

Tumour suppression related human fukutin oligo SEQ ID No 468.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

WO2003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208.

(MOLE-) MOLECULAR ENGINES LAB L7-SEP-2001; 2001FR-00011978.

Tuijnder M; Amson R, Telerman A,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies

```
The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that the corresponding RNA. The novel isolated nucleic of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia. Analysis of the expression of the 17 mer nucleic acids in cathent samples is useful for diagnosis and/or prognosis of these components of pattent samples is useful for diagnosis and/or prognosis of these components of protein chips. The nucleic acid sequences of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression correlated human fukutin oligonucleotide of the invention
                                                       Disclosure; Page 88; 720pp; French.
and transfected cells.
```

Sequence 17 BP; 3 A; 10 C; 1 G; 3 T; 0 U; 0 Other;

Gaps 0 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ative 0; Mismatches 1; Indels 12; Conservative Local Similarity Query Match Matches

ö

921 ATCACCACCACCC 933 ATCACCCCCACCC 14 N

g ð

0

RESULT 1097

ABT35188

ABT35188 standard; DNA; 17 BP. 

ABT35188;

12-JUN-2003 (first entry)

Tumour suppression related human fukutin oligo SEQ ID No 825.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

WO2003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M; Amson R, Telerman A,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

The invention relates to a novel isolated 17 mer nucleic acid sequence, cgiven in the specification, a sequence containing at least 15 consecutive given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence that alignment, at least 80 % identity to the 17 mer sequence, a sequence that thybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic caids of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, cells containing the nucleic or antibodies directed against the polypeptides are useful for vector or antibodies directed against the polypeptides are useful for disponentation, specifically cancer but also Alzheimer's disease and degeneration, specifically cancer but also Alzheimer's disease and diseases. The polypeptides can also be used to generate antibodies, and of the invention can be used in gene therapy. This polymucleotide sequence represents a tumour suppression cor therapy. This polymucleotide of the invention Disclosure; Page 129; 720pp; French.

3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; Sequence 17 BP; 5 A; 2 C; 3 G; 7 T; 0 U; 0 Other; Pred. No. 7.4e 0; Mismatches 12; Conservative Query Match Best Local Similarity Matches

936 CAGAGAATTTTAC 948 4 CAGAGAATTTTC 16 ð qq

ABT36587 standard; DNA; 17 BP. 12-JUN-2003 ABT36587; RESULT 1098 ABT36587, 

Tumour suppression related human fukutin oligo SEQ ID No 2224. (first entry)

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

WO2003025175-A2

27-MAR-2003.

L7-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB

Tuijnder M; Amson R, relerman A,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 293; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identify to the 17 mer sequence, a sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of hybridizes to them under highly stringent conditions, or the complement of acids of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents, and for component of a gene chip, in vitro as (anti) sense reagents, and for component of parameteuticals for prevention and/or treatment of viral exector or antibodies directed against the polypeptides are useful for vector or antibodies directed against the polypeptides are useful for generation, specifically cancer but also Alzheimer's disease and degeneration, specifically cancer but also Alzheimer's disease and diseases. The polypeptides can also be used to generate antibodies, and for prognosis of these chizophrenia. The nucleic acid sequences of the invention can be used in gene therapy. This polynucleotide sequence represents a tumour suppression centareted human fukutin oligonucleotide of the invention 

Sequence 17 BP; 4 A; 6 C; 4 G; 3 T; 0 U; 0 Other;

Gaps . Match 3.9%; Score 11.4; DB 1; Length 17; Local Similarity 92.3%; Pred. No. 7.4e+02; nes 12; Conservative 0; Mismatches 1; Indels Query Match Best Loca Matches

· 0

qq

à

. 0

Gaps .,

1; Indels

RESULT 1099 ABT38629

ABT38629 standard; DNA; 17 BP.

ABT38629;

(first entry) 12-JUN-2003 Tumour suppression related human fukutin oligo SEQ ID No 4266.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

Homo sapiens.

WO2003025175-A2.

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M; relerman A, Amson R,

WPI; 2003-313353/30.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells. 

Disclosure; Page 532; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive

nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that hybridizes to them under highly stringent conditions, or the complement of any of them or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying and/or amplifying a nucleic acid, e.g. as one component of agene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, belypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell caparention, specifically cancer but also Alzheimer's diseases and solizophrenia. Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these chips. The nucleic acid sequences of the invention can be used in gene cherapy. This polypeptides are useful as components of protein characterial contains a temperate autibodies. therapy. This polynucleotide sequence represents a rumm related human fukutin oligonucleotide of the invention 

Sequence 17 BP; 4 A; 2 C; 6 G; 5 T; 0 U; 0 Other;

Gaps 0; Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 1; Indels 0; Mismatches 3.9%; 12; Conservative Best Local Similarity Query Match Matches

RESULT 1100 ABT37602

ABT37602 standard; DNA; 17 BP. THE STATE OF STATE OF

(first entry) 12-JUN-2003 ABT37602;

Tumour suppression related human fukutin oligo SEQ ID No 3239.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds.

WO2003025175-A2

27-MAR-2003.

17-SEP-2002; 2002WO-IB004208.

17-SEP-2001; 2001FR-00011978.

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder M;

WPI; 2003-313353/30.

Telerman A, Amson R,

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.

Disclosure; Page 412; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, your in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence, a sequence that

hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic acids of the invention are useful as probes and primers for detecting, identifying, quantifying and/or amplifying a nucleic acid, e.g. as one proponent of a gene chip, in vitro as (anti)sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, oplypeptides, vectors containing the nucleic acids, cells containing the vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell diseases that an Analysis of the expression of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequence represents a tumour suppression the cherapy. This polynucleotide sequence represents a tumour suppression cherap. This polynucleotide sequence represents a tumour suppression cherap. 

Sequence 17 BP; 5 A; 10 C; 1 G; 1 T; 0 U; 0 Other;

.. 0 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels Query Match Best Local Similarity 92.3' "...rhes 12; Conservative

0

ਨੋ 셤

ö

RESULT 1101 ABT39947,

BP. ABT39947 standard; DNA; 17

ABT39947;

13-JUN-2003 (first entry)

Tumour suppression related human fukutin oligo SEQ ID No 5584.

Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; gene chip; antisense; sense; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; protein chip; gene therapy; tumour suppression; human fukutin; ds. 

Homo sapiens.

WO2003025175-A2.

27-MAR-2003.

L7-SEP-2001; 2001FR-00011978.

17-SEP-2002; 2002WO-IB004208.

(MOLE-) MOLECULAR ENGINES LAB.

Tuijnder Amson R, Telerman A,

Ξ

WPI; 2003-313353/30.

and transfected cells.

New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies

Disclosure; Page 686; 720pp; French.

The invention relates to a novel isolated 17 mer nucleic acid sequence, given in the specification, a sequence containing at least 15 consecutive nucleotides from the 17 mer sequence, a sequence with, after optimal alignment, at least 80 % identity to the 17 mer sequence that hybridizes to them under highly stringent conditions, or the complement of any of them, or the corresponding RNA. The novel isolated nucleic

dentifying, quantifying and/or amplifying a nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents, and for production of recombinant polypeptides. Any of the nucleic acids, polypeptides, vectors containing the nucleic acids, cells containing the polypeptides, vector or antibodies directed against the polypeptides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell diseases that are characterised by development of tumours or cell diseases that an entrangement of the 17 mer nucleic acids in patient samples is useful for diagnosis and/or prognosis of these diseases. The polypeptides can also be used to generate antibodies, and both the polypeptide and antibodies are useful as components of protein chips. The nucleic acid sequence of the invention can be used in gene therapy. This polymicleotide sequence represents a tumour suppression characted human fukutin oligonucleotide of the invention acids of the invention are useful as probes and primers for detecting,

Seguence 17 BP; 4 A; 5 C; 4 G; 4 T; 0 U; 0 Other;

1; Indels Score 11.4; DB 1; Pred. No. 7.4e+02; 0; Mismatches 1; ; Match 3.9%; Local Similarity 92.3%; hes 12; Conservative ( 877 ITCCTGAGATGCA 889 17 Trccreadageca 5 Query Match Matches g δ

ö

Gaps .;

Length 17;

RESULT 1102

ACA06884 standard; RNA; 17 BP. ACA06884

ACA06884;

(first entry)

03-JUN-2003

NFKB sub-unit modulating inozyme substrate #703.

Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; oesophageal cancer; colorectal cancer; brain cancer; costate cancer; colorectal cancer; pancreatic cancer; corporated cancer; had cancer; pancreatic cancer; hymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methorraxate; cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate; gencitabine; radiation therapy; inflammatory disease; aschma; diabetes; rheumatorid arthritis; restenosis; Crohn's disease; obesity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion injury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss.

Homo sapiens.

US2002177568-A1.

28-NOV-2002.

23-MAY-2001; 2001US-00864785. 92US-00987132. 94US-00245466. 94US-00291932. 18-MAY-1994; 15-AUG-1994; 23-DEC-1996; 07-DEC-1992;

STIN/) STINCHCOMB D T. MCSWIGGEN J. DRAPER K G. (MCSW/) (DRAP/)

96US-00777916

Stinchcomb DT, Mcswiggen J, Draper KG;

WPI; 2003-340953/32

Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.

à

28-NOV-2002

23-MAY-2001; 2001US-00864785.

The invention describes an enzymatic nucleic acid molecule (I) which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFKB), where (I) is an inozyme, Zinzyme, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat configuration. The enzymatic nucleic acid molecule is adapted to treat can useful for down-regulating REL-A activity in a call, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially MG^2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or multidrug resistant cancer. The method involves use of other drug therapies such as monoclonal antibodies, REL-A-specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edarrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, darrexate, cold molecules are also useful for treating inflammatory disease such as cid molecules are also useful for treating inflammatory disease such as channed to a cold molecules of the carbons of the carbons of the cold as the carbons of the ca ö rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury (central nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence represents the substrate of a novel enzymatic nucleic acid molecule rheumatoid arthritis, restencisis, Crohn's disease, obesity, ischaemia, gene therapy, autoimmune disease, lupus, multiple sclerosis, sepsis; transplant/graft rejection, reperfusion injury, glomerulonephritis; allergic airway inflammation; inflammatory bowel disease, infection, se Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; prostate cancer; colorectal cancer; brain cancer; cesophageal cancer; stomach cancer; bladder cancer; panoreatic cancer; cervical cancer; head and neck cancer; ovarian cancer; melanoma; lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paciltaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate; gemcitabine; radiation therapy; inflammatory disease; asthma; diabetes; Gaps .. 0 3.9%; Score 11.4; DB 1; Length 17; 46.2%; Pred. No. 7.4e+02; tive 6; Mismatches 1; Indels Sequence 17 BP; 4 A; 5 C; 1 G; 0 T; 7 U; 0 Other; NFKB sub-unit modulating inozyme substrate #702. Claim 3; Page 37; 72pp; English. ACA06883 standard; RNA; 17 BP. 835 TITCTTCTCAA 847 03-JUN-2003 (first entry) 2 UUUCUACUCUGAA 14 Best Local Similarity 46.2 Matches 6; Conservative US2002177568-A1. ACA06883; Query Match RESULT 1103 ACA06883 g

```
The invention describes an engineer actu molecule (1) winch to regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFKB), where (1) is an inozyme, zinzyme, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. (1) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially Mg'2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or multidrug resistant cancer. The method involves use of other drug cervical, neck as monoclonal antibodies, REL-A-specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, fluorocuracil carboplatin, edatrexate, cyclophosphamide, doxorubin, fluorocuracil carboplatin, edatrexate, edid molecules are also useful for treating inflammatory disease such as cid molecules are also useful for treating inflammatory disease such as rether
                                                                                                                                                                                                                                                                                                                             Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        invention describes an enzymatic nucleic acid molecule (I) which down
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               central nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence represents the substrate of a novel enzymatic nucleic acid molecule
                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 3; Page 37; 72pp; English.
                                                                                                                                        STINCHCOMB D T.
                                                                                                                                                              MCSWIGGEN J.
DRAPER K G.
                                                                                                                                                                                                                                                                                 WPI; 2003-340953/32.
                                                                                                                                                                                                                                 Stinchcomb DT,
                                            18-MAY-1994;
                                                                                           23-DEC-1996;
                                                                15-AUG-1994;
                                                                                                                                        (/NILS)
                                                                                                                                                                                  (DRAP/)
                                                                                                                                                              (MCSM/)
```

.. Length 17; 1; Indels Sequence 17 BP; 3 A; 5 C; 2 G; 0 T; 7 U; 0 Other; 3.9%; Score 11.4; DB 1; 16.2%; Pred. No. 7.4e+02; Ive 6; Mismatches 1; 46.2%; 6; Conservative Local Similarity Query Match Matches

ò

Gaps

835 TTTCTTCTGAA 847 5 UUUCUACUCUGAA 17 d

ACA08328 standard; DNA; 17 BP. (first entry) 03-JUN-2003 ACA08328; RESULT 1104 ACA08328
XX
AC ACA0
XX
XX
DY
XX
DY
XX
KW
Enzy
KW
G-cl
KW
G-cl
KW
Ston
KW
Heac

Necrosis factor kappa B (NFKB) sub-unit modulating DNAzyme #97.

G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; lung cancer; prostate cancer; colorectal cancer; brain cancer; oesophageal cancer; stomach cancer; bladder cancer; pancreatic cancer; cervical cancer; Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme; head and neck cancer; ovarian cancer; melanoma; lymphoma; glioma; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide;

radiation therapy, inflammatory disease, asthma; diabetes, rheumatoid arthritis, restenosis, Crohn's disease, obesity, ischaemia, gene therapy, autoimmune disease, lupus, multiple sclerosis, sepsis, transplant/graft rejection, reperfusion injury, glomerulonephritis, allergic airway inflammation; inflammatory bowel disease, infection; ss. fluorouracil carboplatin; edatrexate; gemcitabine; 94US-00245466. 94US-00291932. 96US-00777916. 23-MAY-2001; 2001US-00864785. 92US-00987132 STINCHCOMB D T. MCSWIGGEN J. DRAPER K G. US2002177568-A1. 07-DEC-1992; 18-MAY-1994; 15-AUG-1994; 23-DEC-1996; 28-NOV-2002 (STIN/) (MCSW/) (DRAP/) 

Draper KG;

Mcswiggen J,

94US-00245466. 96US-00777916.

92US-00987132

Draper KG; Stinchcomb DT, Mcswiggen J,

WPI; 2003-340953/32.

Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.

Claim 3; Page 49; 72pp; English.

regulates expression of a sequence encoding a subunit of nuclear factor.
Kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A.

(I) is useful for cleaving RNA comprising a sequence of REL-A. game, in the presence of a divalent cation, especially MG-2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stromach, bladder, pancreatic, cervical, head and neck, ovarian cancer, melanoma, lymphoma, glioma or therapies such as monoclonal antibodies, REL-A-specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, colorbosphanamide, doxorubin, fluorouracil carboplatin, edetrexate, conversed. invention describes an enzymatic nucleic acid molecule (I) which down gencitabine or radiation therapy. The enzymatic and antisense nucleic acid molecules are also useful for treating inflammatory disease such as rheumatoid arthritis, restenosis, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple sclerosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury (Sentral nervous system (CNS) and myocardial), glomerulonephritis, sepsis, allergic airway inflammation, inflammatory bowel disease or infection. This sequence represents an enzymatic nucleic acid used to modulate the function of a necrosis factor kappa B sub-unit

Sequence 17 BP; 3 A; 6 C; 1 G; 0 T; 7 U; 0 Other;

Gaps .; 0 Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 6; Mismatches 1; Indels 3.9%; 6; Conservative Local Similarity Query Match Best Loca Matches

ö

835 TITCITCICIGAA 847 *::|: |:|:|| 4 UUUCUACUCUGAA 16 8

ACA09135 standard; RNA; 17 BP RESULT 1105 ACA09135/ ID ACA0

rng.res

```
gemoitabine; radiation therapy; inflammatory disease; asthma; diabetes; rheumatoid arthritis; restenosis; Crohn's disease; obesity; ischaemia; gene therapy; autoimmune disease; lupus; multiple sclerosis; sepsis; transplant/graft rejection; reperfusion injury; glomerulonephritis; allergic airway inflammation; inflammatory bowel disease; infection; ss.
                                                                                      G-cleaver; amberzyme; cancer; REL-A activity; breast cancer; human; lung cancer; prostate cancer; olorectal cancer; brain cancer; occophageal cancer; stomach cancer; bladder cancer; pancreatic cervical cancer; head and neck cancer; ovarian cancer; melanoma; lymphona; gliona; multidrug resistant cancer; REL-A-specific inhibitor; chemotherapy; paclitaxel; docetaxel; cisplatin; methotrexate; cyclophosphamide; doxorubin; fluorouracil carboplatin; edatrexate;
                                                                              Enzymatic nucleic acid; nuclear factor kappa B; NFKB; inozyme; zinzyme;
                                                     NFKB sub-unit modulating amberzyme substrate #298.
                                                                                                                                                                                                                                                                                                                                     92US-00987132.
94US-00245466.
94US-00291932.
96US-00777916.
                                                                                                                                                                                                                                                                                                               23-MAY-2001; 2001US-00864785.
                               03-JUN-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                              (STIN/) STINCHCOMB D T. (MCSW/) MCSWIGGEN J.
                                                                                                                                                                                                                                                                                                                                                                                                                        DRAP/) DRAPER K G.
                                                                                                                                                                                                                                                                    US2002177568-A1
                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                    18-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                          23-DEC-1996;
                                                                                                                                                                                                                                                                                                                                                            5-AUG-1994;
                                                                                                                                                                                                                                                                                          28-NOV-2002.
           ACA09135;
```

Stinchcomb DT, Mcswiggen J, Draper KG;

WPI; 2003-340953/32.

Novel enzymatic nucleic acid molecules which down regulates expression of a sequence encoding a subunit of nuclear factor kappa B useful for treating cancer, inflammatory disorders and autoimmune diseases.

Claim 3; Page 57; 72pp; English

regulates expression of a sequence encoding a subunit of nuclear factor kappa B (NFKB), where (I) is an inozyme, zinzyme, G-cleaver or amberzyme configuration. The enzymatic nucleic acid molecule is adapted to treat cancer and is useful for down-regulating REL-A activity in a cell, for treating a patient having a condition associated with the level of REL-A. (I) is useful for cleaving RNA comprising a sequence of REL-A gene, in the presence of a divalent cation, especially MG^2+. The enzymatic and antisense nucleic acid molecules are useful for treating breast, lung, prostate, colorectal, brain, oesophageal, stomach, bladder, pancreatic, cervical, head and neck, ovarian cancer; melanoma, lymphoma, glioma or multidrug resistant cancer. The method involves use of other drug therapies such as monoclonal antibodies, REL-A-specific inhibitors or chemotherapy including paclitaxel, docetaxel, cisplatin, methotrexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edairexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, edairexate, cyclophosphamide, doxorubin, fluorouracil carboplatin, carbotesses uch as acid molecules are also useful for treating inflammatory disease such as cid molecule arbitis; restenosis, asthma, Crohn's disease, diabetes, obesity, autoimmune disease, lupus, multiple scierosis, transplant/graft rejection, gene therapy applications, ischaemia/reperfusion injury ception, gene therapy applications, ischaemia/reperfusion injury ception. This sequence represents the substrate of a novel enzymatic infection. This sequence represents the substrate of a novel enzymatic infection. The invention describes an enzymatic nucleic acid molecule (I) which down

934 TCCAGAGAATTTT 946

ò

```
The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is proteins and their coding sequences: MDZ3, MDZ4, MDZ12. MDZ3 is encoded at chromosome [6p11.3 and MDZ12 is encoded at chromosome [6p11.2 and MDZ12 is encoded at chromosome con in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7, or MDZ12, e.g. cancer or developmental disorders. The nucleic caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic cuseful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ò
                                                                              ..
                                                                                                                                                                                                                                                                                                                                                                                                          Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ4; MDZ4; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ..
                                                                              ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; Live 0; Mismatches 1; Indels
                                      ch 3.9%; Score 11.4; DB 1; Length 17; 1 Similarity 92.3%; Pred. No. 7.4e+02; 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 4 A; 4 C; 3 G; 6 T; 0 U; 0 Other;
Sequence 17 BP; 1 A; 3 C; 7 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                       Human MDZ3 scanning oligonucleotide SEQ ID 242.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 8; SEQ ID NO 242; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                            ADA99253 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30-JUL-2002; 2002EP-00016874.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    02-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shannon M, Gu Y, Nguyen C;
                                                                                                                     778 AGGGCAGCCCCTC 790
                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 92.33
Matches 12; Conservative
                                                                                                                                                       17 AAGGCAGCCCTC 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-423107/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (AEOM-) AEOMICA INC.
                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EP1281758-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           05-FEB-2003.
                                                                                                                                                                                                                                                                                                                                       20-NOV-2003
                                                                                                                                                                                                                                                                                                  ADA99253;
                                            Query Match
                                                                                                                                                                                                                        RESULT 1106
                                                                                    Matches
                                                                                                                                                                                                                                            ADA99253
                                                                                                                                                                                                                                                                              g
                                                                                                                             à
                                                                                                                                                               셤
```

BP

(first entry)

20-NOV-2003 (first entry)

```
Cytostatic; immunostimulant; gene therapy; vaccine; human;
zinc finger protein; MDZ4; MDZ4; MDZ12; chromosome 7q22.1;
chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
                                                                                                                                                                                                                                                                                                                                                                                          Human MDZ3 scanning oligonucleotide SEQ ID 241.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30-JUL-2002; 2002EP-00016874.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-AUG-2001; 2001US-00922181.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shannon M, Gu Y, Nguyen C;
                                                                                                                                                                         ADA99252 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           developmental disorder; ss
       TCCAGAGACTTTT 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-423107/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EP1281758-A2
                                                                                                                                                                                                                                                                                                                        20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     05-FEB-2003.
                                                                                                                                                                                                                                                  ADA99252;
                                                                                                          RESULT 1107
                                                                                                                                        ADAS9252

ADAS9252

ANA ADAS

ADAS

ANA ADAS

ADAS

ANA 
g
```

à g The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is proteins and their coding sequences: MD23, MD24, MD27, MD212. MD23 is encoded at chromosome 6p21.3-22, MD27 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 15p11.2 and MD212 is encoded at chromosome 25p11.2 and MD212 is encoded at chromosome 25p11.2 and MD212 is encoded at chromosome 25p11.2 and MD213, MD24, MD21, e.g. cancer or developmental disorders. The nucleic 25p12 and proteins are also useful for diagnosing or monitoring a disease 25p12 and 25p12 an ö New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ7 or MDZ1, e.g. cancer. Gaps .; 0 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels Sequence 17 BP; 4 A; 4 C; 3 G; 6 T; 0 U; 0 Other; Example 8; SEQ ID NO 241; 103pp; English. ADA99255 standard; DNA; 17 BP. 92.38; 934 TCCAGAGAATTTT 946 5 TCCAGAGACTITT 17 Local Similarity 92.3 les 12; Conservative Query Match RESULT 1108

ADA99255

ADA99255 ID ADA9 XX AC ADA9

Matches

0;

```
proteins and their coding sequences: MD23, MD24, MD21, MD212. MD23 is proteins and their coding sequences: MD23, MD24, MD21, MD212. MD23 is encoded at chromosome 7q22.1, MD24 is encoded at chromosome 16p11.2 and MD212 is encoded at chromosome 16p2 in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MD23, MD24, MD27, or MD212, e.g. cancer or developmental disorders. The nucleic caused by altered expression of MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross alterations in MD23, MD24, MD27, or MD212. The nucleic acids can also be used as probes to detect and characterize gross alterations in MD23, MD24, MD27, or MD212 genetic locus. The probes are useful as therapeutic agents for gene therapy or as vaccines. The present sequence was used to illustrate the invention.
                                                                                                 Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MD23; MD24; MD27; MD212; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer; developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytostatic; immunostimulant; gene therapy; vaccine; human; zinc finger protein; MDZ4; MDZ7; MDZ12; chromosome 7q22.1; chromosome 6p21.3-22.2; chromosome 16p11.2; chromosome 15q26.1; cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention relates to novel human zinc finger-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.4; DB 1; Length 17; 12.3%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 3 A; 4 C; 5 G; 5 T; 0 U; 0 Other;
                                                           Human MDZ3 scanning oligonucleotide SEQ ID 244.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human MDZ3 scanning oligonucleotide SEQ ID 243.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Example 8; SEQ ID NO 244; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                            30-JUL-2002; 2002EP-00016874.
                                                                                                                                                                                                                                                                                                                                                                       32-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ပ်
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADA99254 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gu Y, Nguyen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  934 TCCAGAGAATTTT 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20-NOV-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 3.9
Best Local Similarity 92.3
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2 rccasasacriri 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-423107/40.
                                                                                                                                                                                                                                                                                                                                                                                                             (AEOM-) AEOMICA INC
                                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                           EP1281758-A2
                                                                                                                                                                                                                                                                                      05-FEB-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shannon M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADA99254;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADA99254
```

```
The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immundeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524,
                                                                                                                                                                                                                                                Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras;
enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 4 A; 5 C; 4 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Human HER2 DNAzyme substrate #361.
                                                                                                                                                                                                                                                                                                                                                  Claim 4; Page 141; 185pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABZ64904 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            29-MAY-2002; 2002WO-US016840.
                 29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RIBO-) RIBOZYME PHARM INC.
                                                                                                                (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                857 CTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ribozymes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21-MAR-2003 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16 creecrecaerre 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 2003-140484/13.
                                                                                                                                                                                                         WPI; 2003-140484/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200297114-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               05-DEC-2002.
                                                                                                                                                                 Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABZ64904;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ABZ64904,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to novel human zinc finger-containing proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is proteins and their coding sequences: MDZ3, MDZ4, MDZ7, MDZ12. MDZ3 is encoded at chromosome 7q22.1, MDZ4 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 16p11.2 and MDZ12 is encoded at chromosome 15q26.1. The MDZ3, MDZ4, MDZ7, and MDZ12 sequences are useful in therapy, or in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3, MDZ4, MDZ1, e.g. cancer or developmental disorders. The nucleic acids and proteins are also useful for diagnosing or monitoring a disease caused by altered expression of MDZ3, MDZ4, MDZ7, or MDZ12. The nucleic acids can also be used as probes to detect and characterize gross alterations in MDZ3, MDZ4, MDZ7, or MDZ12. The probes are useful in constructing microarrays for measuring gene expression. The proteins are useful as therapeutic agents for gene therapy or as proteins are useful as therapeutic agents for gene therapy or as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
0
                                                                                                                                                                                                                                                                                                                                                                                                                       New zinc finger-containing proteins and nucleic acids, useful in manufacturing a medicament for treating or preventing a disorder associated with decreased or increased expression or activity of MDZ3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV; anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 4 A; 4 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Example 8; SEQ ID NO 243; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human HER2 DNAzyme substrate #416.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MDZ4, MDZ7 or MDZ12, e.g. cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABZ64959 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-MAY-2002; 2002WO-US016840.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%;
                                                                                                                                                                                          30-JUL-2002; 2002EP-00016874
                                                                                                                                                                                                                                        02-AUG-2001; 2001US-00922181
                                                                                                                                                                                                                                                                                                                                   Gu Y, Nguyen C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  934 TCCAGAGAATITT 946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21-MAR-2003 (first entry)
  developmental disorder; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3 rccadadacrirr 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sest Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                       (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-423107/40.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200297114-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                     Homo sapiens
                                                                                                  EP1281758-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-DEC-2002
                                                                                                                                                05-FEB-2003.
                                                                                                                                                                                                                                                                                                                                      Shannon M,
```

ABZ64959;

RESULT 1110

ABZ64959/

Query Match

Matches

ò g

0;

Gaps

.,

```
acid molecule or an enzymatic nucleic acid molecule, that modulates expression of a nucleic acid molecule encoding HBR2, K-Ras, H-Ras, N-Ras, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing HBR2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ65524, ABZ65530 - ABZ65580 - ABZ65584, ABZ65530 - ABZ6588 Fepresent substrate/target sequences for the human
                                                                                                        invention relates to a novel short interfering RNA (siRNA) nucleic
Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K.Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; ribozyme; short interfering RNA; siRNA; HER2; K-Ras; enzymatic nucleic acid; H-Ras; N-Ras; HIV; cytostatic; anti-HIV;
                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 2 A; 5 C; 7 G; 0 T; 3 U; 0 Other;
                                                                     Claim 4; Page 140; 185pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human HER2 DNAzyme substrate #417.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                anti-rheumatic; cancer; AIDS; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABZ64960 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-MAY-2002; 2002WO-US016840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                  ribozymes of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                             776 TGAGGGCAGCCCC 788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 92.3
hes 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAGCGCAGCCCC 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-140484/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO200297114-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   05-DEC-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABZ64960;
                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1112
                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABZ64960/
 à
```

·;

Gaps

. 0

1; Indels

```
ö
rheumatic activity. The nucleic acid molecules are useful for reducing HER2, K-Ras, H-Ras, and HIV activity in a cell. The nucleic acids are also useful for treating breast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66524, ABZ65530 - ABZ66585 represent substrate/target sequences for the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      acid molecule or an enzymatic nucleic acid molecule, that modulates human immundeficiancy virus (HIV) or a component of HIV. The nucleic acid molecule encoding HER2, K-Ras, H-Ras, N-Ras, human immundeficiency virus (HIV) or a component of HIV. The nucleic acid molecule acid molecule of the invention has cytostatic, anti-HIV, and anti-rheumatic activity. The nucleic acid molecules are useful for reducing also useful for reducing preast, ovarian, colorectal, lung, prostate, bladder, or pancreatic cancer, and HIV infection, and AIDS. The sequences shown in ABZ59889 - ABZ62216, ABZ64544 - ABZ65531, ABZ66520 - ABZ66585 represent substrate/target sequences for the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to a novel short interfering RNA (siRNA) nucleic
                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Novel short interfering RNA and enzymatic nucleic acid useful for treating cancer, modulates the expression of a nucleic acid encoding HER2, K-Ras, H-Ras, N-Ras, and human deficiency virus sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, ribozyme, short interfering RNA, siRNA, HER2, K-Ras,
enzymatic nucleic acid, H-Ras, N-Ras, HIV, cytostatic, anti-HIV,
anti-rheumatic, cancer, AIDS, ss.
                                                                                                                                                                                                                   0
                                                                                                                                                                                  Length 17;
                                                                                                                                                                                                                   Indels
                                                                                                                                          Sequence 17 BP; 4 A; 7 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                              Score 11.4; DB 1;
Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 1 A; 6 C; 6 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human HER2 DNAzyme substrate #360.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 4; Page 140; 185pp; English.
                                                                                                                                                                                                             . . 0
                                                                                                                                                                                                                                                                                                                                                                          BP
                                                                                                                                                                              3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         29-MAY-2002; 2002WO-US016840.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        29-MAY-2001; 2001US-0294140P.
06-JUN-2001; 2001US-0296249P.
10-SEP-2001; 2001US-0318471P.
                                                                                                         ribozymes of the invention
                                                                                                                                                                                                                                                 869
                                                                                                                                                                                                                                                                                                                                                                        ABZ64903 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ribozymes of the invention
                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                  Crescrecaerre 1
                                                                                                                                                                                                                                                 857 CTGGCTCCAGTTG
                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-140484/13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200297114-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mcswiggen J;
                                                                                                                                                                                                                                                                                                                                                                                                                                             21-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-DEC-2002
                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                          ABZ64903;
                                                                                                                                                                                                                                                                                                                                       RESULT 1113
                                                                                                                                                                                                                                                                                                                                                       ABZ64903
   à
                                                                                                                                                                                                                                                                                g
```

DB 1; Length 17;

3.9%; Score 11.4;

Query Match

The invention relates to a novel short interfering RNA (siRNA) nucleic acid molecule, that modulates acid molecule or an enzymatic nucleic acid molecule moding HRE2, K-Rasi, H-Rasi, M-Rasi, human immunodeficiency virus (HIV) or a component of HIV. The nucleic acid molecule of the invention has cytostatic, anti-HIV, and anti-

Claim 4; Page 141; 185pp; English.

HCV

ACD63522

ð

```
that modulate the expression and/or replication of HCV. The compounds methods of the invention are useful for the treatment of degenerative disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the DNAzyme or minus strand DNAzyme sequences disclosed in the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RIBOZYME PHARM INC.
                                                                                                                                                                                                                                       743 GGTAGGGTCCCAG 755
                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                      3 GGUAGGGUCCAAG 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Macejak D,
Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MCSWIGGEN J. MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-229207/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLATT L.
MACEJAK D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LEE P.
DRAPER K.
ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO200281494-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                       23-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Blatt L, M
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          infection
                                                                                                             invention
                                                                                                                                                                                                                                                                                                                                                                                     ACD55653;
                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (PAVC/)
(LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MCSW/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLAT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MACE/)
                                                                                                                                                                                                                                                                                                                       RESULT 1115
                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                         ACD55653,
                                                                                                                                                                                                                                                                                                                                                                         88888888
                                                                                                                                                                                                                                                                         엄
                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HVV) or Hepatitis B virus (HVV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as harmerhead ribozymes, DNazymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and apramers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds
                              ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                    Nucleic acid molecule, Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degemerative, disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ь.
П
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcswiggen J, Morrissey D, Pavco P, Lee
                                ;
                                Indels
                                                                                                                                                                                                                                                                            HCV minus strand DNAzyme substrate sequence #1105.
92.3%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 294; 387pp; English.
                                                                                                                                                                              ACD63522 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-MAR-2001; 2001US-00817879.
08-JUN-2001; 2001US-0087478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26-MAR-2002; 2002WO-US009187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RIBOZYME PHARM INC.
                                                                                                                                                                                                                                              (first entry)
                                                              776 TGAGGCCAGCCCC 788
                                 Conservative
                                                                                    15 TGAGCGCAGCCCC 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Macejak D,
Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-229207/22
                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LEE P.
DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO200281494-A1.
                                                                                                                                                                                                                                                30-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-0CT-2002.
                                   12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Blatt L, )
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     infection.
                                                                                                                                                                                                               ACD63522;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-) | (BLAT/) | (MACE/) | (MCSW/) |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (PAVC/)
(LEEP/)
(DRAP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (MORR/)
                                                                                                                                                 RESULT 1114
                                   Matches
```

·; Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus Nucleic acid molecule, Hepatitis C virus, HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis, antisense; enzymatic nucleic acid, hammerhead ribozyme; DNAzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative, disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss. Gaps Lee P; ., Match 3.9%; Score 11.4; DB 1; Length 17; Local Similarity 76.9%; Pred. No. 7.4e+02; les 10; Conservative 2; Mismatches 1; Indels ф ф Pavco Mcswiggen J, Morrissey D, Sequence 17 BP; 5 A; 3 C; 6 G; 0 T; 3 U; 0 Other; HBV amberzyme substrate sequence #163. Example 1; Page 206; 387pp; English ACD55653 standard; RNA; 17 BP. 26-MAR-2001; 2001US-00817879. 08-JUN-2001; 2001US-0087478. 08-JUN-2001; 2001US-0296876P. 24-OCT-2001; 2001US-0335059P. 05-DEC-2001; 2001US-0337055P. 26-MAR-2002; 2002WO-US009187.

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, amberzymes, amberzymes, and G-cleaver ribozymes. DNAzymes, incymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV C genes and HBV viral replication. Also disclosed is a method for screening that modulate the expression and/or replication of HCV. The compounds and compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and heptocellular carcinoma. The present sequence represents a substrate for one of the HBV and carcinoma. The present sequence substrate for one of the HBV and allowed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Nucleic acid molecule, Hepatitis C virus, HCV; Hepatitis B virus, HBV, RNA stability, RNA expression, RNA synthesis, antisense, enzymatic nucleic acid, hammerhead ribozyme; DNAzyme, inozyme; zinzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
HBV reverse transcriptase; Enhancer I region; viral replication;
degenerative; disease state; HBV infection; HCV infection; cirrhosis;
liver failure; hepstocallular carcinoma; hepatotropic; cytostatic;
virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
3.9%; Score 11.4; DB 1; Length 17;
Best Local Similarity 92.3%; Pred. No. 7.4e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 5 A; 0 C; 8 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HBV amberzyme substrate sequence #164.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        disclosed in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACD55654 standard; RNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
24-OCT-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-2002; 2002WO-US009187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   26-MAR-2001; 2001US-00817879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            805 CICCICCAACICA 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15 crecreceacies 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
PAVCO P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hepatitis B virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO200281494-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LEE P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-OCT-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACD55654;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (RIBO-)
(BLAT/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (MORR/)
(PAVC/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (DRAP/)
(ROBE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LEEP/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACD55654/c
XX
AC ACD556;
XX
DX 23-SEP
XX
DX 23-SEP
XX
CW Nuclei
KW RNA st
KW GEORE
KW HBV re
GEORE
KW NOOCC
KW NOOCC
KW NOCC
K
              õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      셤
```

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, and enzymes, zinzymes, amberzymes, and G-cleaver ribozymes. DNAzymes, consymptic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonuclectides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV capes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapics disclosed is a method for screening that modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HBV is chosent, inoxyme, doctorer and presences
                                                                                               Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; zinzyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          amberzyme; G-cleaver ribozyme; decoy molecule; aptamer;
HBV reverse transcriptase; Enhancer I region; viral replication;
degenerative; disease state; HBV infection; HCV infection; cirrhosis;
liver failure; hepatocellular carcinoms; hepatotropic; cytostatic;
virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
      ь,
        ree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02;
      Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1; Indels
    Ď,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 4 A; 0 C; 9 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HCV minus strand DNAzyme substrate sequence #928.
    Morrissey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                          Example 1; Page 206; 387pp; English.
    Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                disclosed in the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACD63177 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              26-MAR-2002; 2002WO-US009187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001US-00817879.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001US-00877478.
2001US-0296876P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001US-0335059P.
2001US-0337055P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          805 CICCICCAACICA 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 92.3 es 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14 CTCCTCCCACTCA 2
Macejak D,
Roberts E;
                                                          WPI; 2003-229207/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hepatitis C virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200281494-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       08-JUN-2001;
08-JUN-2001;
24-OCT-2001;
05-DEC-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      24-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-0CT-2002.
  Blatt L,
Draper K,
                                                                                                                                         infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACD63177;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACD6317
  ਨੋ
```

ö

WO200281494-A1.

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and method for increning compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular, the united to the the the theory.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         carcinoma. The present sequence represents a substrate for one of the HCV DNAzyme or minus strand DNAzyme sequences disclosed in the present
                                                                                                                                                                                                                                                                                        Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatocriopic; cytostatic; virucide; antiinflammatory; substrate; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                              Lee P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                              Mcswiggen J, Morrissey D, Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 3 A; 8 C; 1 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.4; DB 1;
Pred. No. 7.4e+02;
3; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HBV amberzyme substrate sequence #162.
                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 291; 387pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACD55652 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%;
               RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                805 CTCCTCCAACTCA 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 69.4-
Best Local Similarity 69.4-
Gonservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |:||:||| |:||
cuccuccaucuca 14
                                                                                                                                                                                              Macejak D,
Roberts E;
                                    BLATT L.
MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                    WPI; 2003-229207/22
                                                                                                     PAVCO P.
LEE P.
DRAPER K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Hepatitis B virus
                                                                                                                                                              ROBERTS E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 23-SEP-2003
                                                                                                                                                                                                Blatt L, |
Draper K,
                                                                                                                                                                                                                                                                                                                            infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACD55652;
                                                                                                                                           (DRAP/)
(ROBE/)
                                                                                     (MORR/)
(PAVC/)
(LEEP/)
                 (RIBO-)
                                                                    (MCSM/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1118
                                                     MACE/)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACD55652,
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  q
```

. 0

```
The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or the patitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes, inozymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV compounds and/or HBV reverse transcriptase primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV compounds and/or potential therapies directed against HBV, and compounds and/or potential therapies directed against HBV, and compounds compounds and/or potential therapies directed against HBV, and compounds and compounds and/or potential therapies directed against HBV, and compounds and compounds and/or potential therapies directed against HBV, and compounds and compounds and/or potential therapies directed against HBV, and compounds and compounds and with a present to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular corribors, inozyme, inozyme, inozyme, inozyme, inozyme, cleaver, zinzyme, DNAzyme or amberzyme sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                             Lee P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                             Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 5 A; 0 C; 8 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                           Mcswiggen J, Morrissey D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HCV DNAzyme substrate sequence #1350.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 206; 387pp; English.
                                                                                                                  08-JUN-2001; 2001US-00877478.
08-JUN-2001; 2001US-0296876P.
08-JUN-2001; 2001US-0335059P.
05-DEC-2001; 2001US-0337055P.
                                                                 26-MAR-2002; 2002WO-US009187
                                                                                               2001US-00817879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACD59492 standard; RNA; 17
                                                                                                                                                                                                     RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            805 CTCCTCCAACTCA 817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best_Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 crccrccacrca 4
                                                                                                                                                                                                                                    MACEJAK D.
MCSWIGGEN J.
MORRISSEY D.
                                                                                                                                                                                                                                                                                                                                                                             Macejak D,
Roberts E;
                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 2003-229207/22
                                                                                                                                                                                                                                                                                                                                              ROBERTS E.
                                                                                                                                                                                                                                                                                                          LEE P.
DRAPER K.
                                                                                                                                                                                                                         BLATT
                                                                                                 26-MAR-2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 24-SEP-2003
                              17-0CT-2002
                                                                                                                                                                                                                                                                                                                                                                               Blatt L, M
Draper K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACD59492;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                     (BLAT/)
(MACE/)
(MCSW/) |
(MORR/) |
(PAVC/)
(LEEP/)
(DRAP/) |
                                                                                                                                                                                                       (RIBO-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 1119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACD59492,
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            임
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  XEXEX
```

·

```
17 Crécrécarerea 5
```

ò 셤

Novel compound useful for treating cirrhosis, liver failure, hepatocellular carcinoma, or condition associated with hepatitis C virus RNA stability; RNA expression; RNA synthesis; antisense; enzymatic nucleic acid; hammerhead ribozymė; GNAzymė; inozyme; amberzymė; G-claever ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative; disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; P. Lee Pavco P, Morrissey D, virucide; antiinflammatory; substrate; ss. Mcswiggen J, 26-MAR-2001; 2001US-00817879. 08-JUN-2001; 2001US-00877478. 08-JUN-2001; 2001US-0296876P. 24-OCT-2001; 2001US-0335059P. 05-DEC-2001; 2001US-0337055P. 26-MAR-2002; 2002WO-US009187 RIBOZYME PHARM INC. Macejak D, Roberts E; MCSWIGGEN J. MORRISSEY D. WPI; 2003-229207/22 LEE P. DRAPER K. ROBERTS E. BLATT L. MACEJAK D. Hepatitis C virus Macejak PAVCO P. WO200281494-A1. 17-0CT-2002. Blatt L, m. infection. (PAVC/) (LEEP/) (DRAP/) (BLAT/) (MACE/) (ROBE/) (RIBO-) (MCSM/) (MORR/) 

Claim 1; Page 258; 387pp; English.

The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or the synthesis, expression and/or stability of Hepatitis C virus (HCV) or and enzymatic nucleic acids such as hammerhead ribozymes, Include antisense and enzymatic nucleic acids such as hammerhead ribozymes. DNAzymes, inozymes, zinzymes, amberzymes, and G-cleaver ribozymes. Also disclosed are nucleic acid decoy molecules and aptamers that bind to HBV reverse transcriptuse primer sequences, as well as oligonucleotides that specifically bind the Enhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV compounds and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular expression such as cirrhosis, liver failure, and hepatocellular expression and man and sequence represents a substrate for one of the HCV deconded or minus strand DNAzyme sequences disclosed in the present invention

Sequence 17 BP; 5 A; 1 C; 8 G; 0 T; 3 U; 0 Other;

```
;
      Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels
        3.9%;
                                                   CTCCTCCAACTCA 817
Query Match
Best Local Similarity 92.37
                                                  805
```

.; 0

Gaps

DNAzyme; inozyme; zinzyme; Nucleic acid molecule; Hepatitis C virus; HCV; Hepatitis B virus; HBV; RNA stability; RNA expression; RNA synthesis; antisenee; enzymatic nucleic acid; hammerhead ribozyme; DNAzyme; inozyme; amberzyme; G-cleaver ribozyme; decoy molecule; aptamer; HBV reverse transcriptase; Enhancer I region; viral replication; degenerative, disease state; HBV infection; HCV infection; cirrhosis; liver failure; hepatocellular carcinoma; hepatotropic; cytostatic; virucide; antiinflammatory; substrate; ss. ь. Б Lee Pavco P, Morrissey D, HCV DNAzyme substrate sequence #1173. Mcswiggen J, ACD59147 standard; RNA; 17 BP. 08-JUN-2001; 2001US-00877478. 08-JUN-2001; 2001US-0296876P. 24-OCT-2001; 2001US-0335059P. 05-DEC-2001; 2001US-033705SP. 26-MAR-2002; 2002WO-US009187 RIBOZYME PHARM INC MACEJAK D. MCSWIGGEN J. MORRISSEY D. PAVCO P. Macejak D, Roberts E; Hepatitis C virus. ROBERTS E. WO200281494-A1. LEE P. DRAPER 26-MAR-2001; 24-SEP-2003 17-0CT-2002 Blatt L, m. ACD59147; ROBE/) (RIBO-) LEEP/) DRAP/) BLAT/) PAVC/) RESULT 1120 MACE/ MORR/) MCSM/ 

for treating cirrhosis, liver failure, oma, or condition associated with hepatitis C virus nepatocellular carcinoma, compound useful WPI; 2003-229207/22 infection.

Claim 1; Page 255; 387pp; English.

Indexymes, zinzymes, amberzymes, and G-Cleaver ribozymes, harder, controlled and aptamers that bind to HBV reverse transcriptase primer sequences, as well as oligomucleotides that specifically bind the Bnhancer I region of HBV DNA. The nucleic acids may be used to modulate the expression of HBV genes and HBV viral replication. Also disclosed is a method for screening compounds and/or potential therapies directed against HBV, and compounds that modulate the expression and/or replication of HCV. The compounds and her with a modulate the expression and/or replication of HCV. The compounds and methods of the invention are useful for the treatment of degenerative and disease states related to HBV and HCV infection, replication and gene expression such as cirrhosis, liver failure, and hepatocellular carcinoma. The present sequence represents a substrate for one of the HCV DNAXYME or minus strand DNAxyme sequences disclosed in the present The present invention relates to nucleic acid molecules which modulate the synthesis, expression and/or stability of Hepatitis C virus (HCV) or Hepatitis B virus (HBV) RNA. The nucleic acid molecules include antisense and enzymatic nucleic acids such as hammerhead ribozymes, DNAzymes,

(first entry)

X S

à g

```
Murine oligonucleotide associated with tumour supression, SEQ ID 2976
ACC65729 standard; DNA; 17 BP
                                                                        01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC68304;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                    ACC65729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC68304
δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;
0
                                                                                             ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                     Cytostatic, virucide, neuroprotective, nootropic, neuroleptic, murine, tumour suppression, tumour reversion, apoptosis, virus resistance, viral disease, tumour, cell degeneration, cancer, Alzheimer's disease,
                                                                                                                                                                                                                                                                                                                                                                    Murine oligonucleotide associated with tumour supression, SEQ ID 2811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                             .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.9%; Score 11.4; DB 1; Length 17; Best Local Similarity 92.3%; Pred. No. 7.4e+02; Matches 12; Conservative 0; Mismatches 1; Indels
                                                     Score 11.4; DB 1; Length 17;
Pred. No. 7.4e+02;
0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17 BP; 5 A; 1 C; 7 G; 4 T; 0 U; 0 Other;
                   Sequence 17 BP; 3 A; 7 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 359; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tuijnder M;
                                                                                         0;
                                                                                                                                                                                                                                                           ACC65564 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-2001; 2001FR-00011979.
                                                     Query Match
Best Local Similarity 92.3%;
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    727 TCTGGTCATAGGA 739
                                                                                                                               743 GGTAGGGTCCCAG 755
                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                  16 GGTAGGGTCCAAG 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus.
                                                                                                                                                                                                                                                                                                                                  01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-MAR-2003.
                                                                                                                                                                                                                                                                                               ACC65564;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                       Query Match
                                                                                                                                                                                                                         1121
                                                                                                                                                                                                                                            ACC65564
```

```
The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptossis and virus resistence. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, gene chip; in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ss.
Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Murine oligonucleotide associated with tumour supression, SEQ ID 5551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0, Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 1 A; 6 C; 3 G; 7 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Disclosure; Page 378; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                        (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                          17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC68304 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             896 TCTCAGCTTCTGC 908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5 rérérécrieres 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity 92.3
Matches 12, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-333167/31.
                                                                                                     schizophrenia; ss.
                                                                                                                                                                                                               WO2003025176-A2.
                                                                                                                                                          Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-JUL-2003
                                                                                                                                                                                                                                                                     27-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Telerman A,
```

ö

Mus musculus

rcreginaragea 15

ò d RESULT 1122 ACC65729

```
Sequence 17 BP; 7 A; 3 C; 4 G; 3 T; 0 U; 0 Other;
                                                                                                                  Disclosure, Page 679; 738pp; French.
                                                                                                                                                                                                                                                                              ACC68413 standard; DNA; 17 BP.
                                                      (MOLE-) MOLECULAR ENGINES LAB
                                          17-SEP-2001; 2001FR-00011979.
                             17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-2002; 2002WO-IB004210
                                                                                                                                                                                                                                                                                                                                                                                                             17-SEP-2001; 2001FR-00011979
                                                                                                                                                                                                                                     909 GATCAGATTATCA 921
                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                1 GATCAGATTACCA 13
                                                                                                                                                                                                                  Local Similarity 92.3
Les 12; Conservative
                                                                   Amson R,
                                                                              WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                  schizophrenia; ss
                                                                                                                                                                                                                                                                                                                                                                         WO2003025176-A2.
      WO2003025176-A2
                                                                  Telerman A,
                                                                                                                                                                                                                                                                                                       01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                              Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                      27-MAR-2003.
                  27-MAR-2003
                                                                                                                                                                                                                                                                                          ACC68413;
                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                  RESULT 1124
                                                                                                                                                                                                                                                                         ACC68413
ð
                                                                                                                                                                                                                                                임
```

Tuijnder M;

Telerman A, Amson R,

WPI; 2003-333167/31

(MOLE-) MOLECULAR ENGINES LAB

```
The present invention relates to murine oligonucleotides (ACC62754-ACC6806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying quantifying and/or amplifying nucleic acid, e.g. as one component of gene chip, in vitro as (anti)sense reagents, and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation
                    New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease; schizophrenia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Murine oligonucleotide associated with tumour supression, SEQ ID 3273
                                                                                                                                                                                                                                                                                                                                                                                   specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 4 A; 2 C; 7 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 413; 738pp; French.
                                                                                                                      Disclosure; Page 692; 738pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tuijnder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC66026 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  976 AICIGGIGIAIGG 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Arcreagarares 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                      and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  with tumors and cell d
and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
les 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO2003025176-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              relerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACC66026;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 1125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ·
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC6806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying quantifying and/or amplifying nucleic acid, e.g. as one component of agene chip; in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration.
                                                                                                                                                                                                                                                                                                                                                   New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cytostatic; virucide, neuroprotective, nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Murine oligonucleotide associated with tumour supression, SEQ ID 5660.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The present invention relates to murine oligonucleotides (ACC62754-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                           Tuijnder M;
```

·;

Gaps

.;

(first entry)

2555×8

ð g

```
ACC63951 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                             27-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Telerman A,
                                                                                                                              01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACC65677;
                                                                                           ACC63951;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1128
                   RESULT 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC65677
                                     ACC63951
                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptoosis and Virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration.
of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Murine oligonucleotide associated with tumour supression, SEQ ID 305.
                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                             Length 17;
                                                                                                                                                    1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seguence 17 BP; 10 A; 2 C; 3 G; 2 T; 0 U; 0 Other;
                                                                            Sequence 17 BP; 8 A; 3 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                             Score 11.4; DB 1;
Pred. No. 7.4e+02;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Disclosure; Page 66; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tuijnder M;
                                                                                                                                                  ;0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                          ACC63058 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17-SEP-2001; 2001FR-00011979.
                                                                                                               Query Match 3.9%;
Best Local Similarity 92.3%;
Matches 12; Conservative C
                                                                                                                                                                                         909 GATCAGATTATCA 921
                                                                                                                                                                                                                                                                                                                                                                                                  (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                            1 GATCAGATTAACA 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     schizophrenia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                  01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                               ACC63058;
                                                                                                                                                                                                                                                                                         RESULT 1126
                                                                                                                                                                                                                                                                                                            ACC63058/
```

```
The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptoosis and virus resistence. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for proparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Murine oligonucleotide associated with tumour supression, SEQ ID 2924.
                                                      Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
Murine oligonucleotide associated with tumour supression, SEQ ID 1198.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 6 A; 5 C; 2 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 171; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                llarity 92.3%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC65677 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 806 TCCTCCAACTCAG 818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3 recracaacreag 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
les 12; Conserv
                                                                                                                                                                schizophrenia; ss.
                                                                                                                                                                                                                                                                                    WO2003025176-A2.
                                                                                                                                                                                                                          Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUL-2003
```

·

. 0

Gaps

.

834 TTTTCTTCTGA 846

à g

15 rrrrrrrarcida 3

```
The present invention relates to murine oligonuclectides (ACC62754-ACC68006), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonuclectides are useful as (1) as probes and primers for detecting, identifying quantifying and/or amplifying uncleic acid, e.g. as one component of a gene chip; in vitro as (auti) sense reagents; and (2) for production of recombinant polypeptides. The oligonuclectides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that see characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                         New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Murine oligonucleotide associated with tumour supression, SEQ ID 3898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; Live 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 5 A; 2 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                     Disclosure; Page 249; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure, Page 486; 738pp; French.
                    Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tuijnder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC66651 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         976 ATCTGGTGTATGG 988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCTGGAGTATGG
                                                                                                                                                                                                        and transfected cells.
                    ж,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman A, Amson R,
                                                                             WPI; 2003-333167/31.
                       Amson
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               schizophrenia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mus musculus.
                Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACC66651;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC66651
             NAME OF THE PROPERTY OF THE PR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of gene chip, in vitro as (anti)sense reagents, and (2) for production of a crombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Murine oligonucleotide associated with tumour supression, SEQ ID 1868.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       present invention relates to murine oligonucleotides (ACC62754-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 17 BP; 5 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 372; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC64621 standard; DNA; 17 BP
                                                                                                                                                                                                                                                    17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                    17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840 TCTCTGAAGACAG 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTCTGAAGACAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  schizophrenia; ss.
                                                                                                                        WO2003025176-A2.
schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003025176-A2
                                                            Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus.
                                                                                                                                                                                        27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27-MAR-2003.
```

Query Match

Matches

ß

g

RESULT 1129

ACC64621;

ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The Oligonucleotides are useful as (1) as probes and primers for detecting, identifying, present invention relates to murine oligonucleotides (ACC62754-

(MOLE-) MOLECULAR ENGINES LAB

17-SEP-2001; 2001FR-00011979.

ö

Gaps

.; 0

14

2 Arcrecrered

g

. 0

```
The present invention relates to murine oligonucleotides (ACC62754-ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in virto as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that
quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonuclectides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cytostatic, virucide, neuroprotective; nootropic; neuroleptic; murine, tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Murine oligonucleotide associated with tumour supression, SEQ ID 445.
                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                           ..
                                                                                                                                                                 Score 11.4; DB 1; Length 17; Pred. No. 7.48+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 3 A; 2 C; 6 G; 6 T; 0 U; 0 Other;
                                                                                                                                   Sequence 17 BP; 5 A; 4 C; 4 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 83; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tuijnder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                             BP.
                                                                                                                                                                           3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-SEP-2001; 2001FR-00011979
                                                                                                                                                                                                                                                                                                                                                                             ACC63198 standard; DNA; 17
                                                                                                                                                                                                                                                 874 ACTITICCIGAGAT 886
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                             12; Conservative
                                                                                                                                                                                                                                                                                   ACTITICCIGGGAT 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        relerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 2003-333167/31.
                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     schizophrenia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             27-MAR-2003.
                                                                                                                                                                                                                                                                                     14
                                                                                                                                                                                                                                                                                                                                                                                                                   ACC63198;
                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                            RESULT 1131
                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                            ACC63198
                                                                                                                                                                                                                                                                                                                                                                                                8888888888
                                                                                                                                                                                                                                                     à
                                                                                                                                                                                                                                                                                       임
```

```
The present invention relates to murine oligonucleotides (ACC62754-ACC68866), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip, in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Murine oligonucleotide associated with tumour supression, SEQ ID 1983.
                                                                                                                                            Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                               Murine oligonucleotide associated with tumour supression, SEQ ID 1404.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٠.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 3 A; 8 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure; Page 195; 738pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                 Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; 1
                                                                                                                                                                                                                                                                                                                                                                                                                  Tuijnder
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                           BP.
                                                                                                                                                                                                                                                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                        17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                   17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC64736 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   751 CCCAGGGTCCCTA 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-JUL-2003 (first entry)
                           ACC64157 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCAGCGTCCCTA 17
                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                  Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-333167/31.
                                                                                                                                                                                                  schizophrenia; ss.
                                                                                                                                                                                                                                                            WO2003025176-A2
                                                                                                                                                                                                                               Mus musculus.
                                                                                                                                                                                                                                                                                           27-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                    Telerman A,
                                                                                        01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ŋ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACC64736
                                                          ACC64157;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1133
RESULT 1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACC64736
              ACC64157
                                           X Z X Z X Z X Z X X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ò
```

ó;

· 0

Gaps

ö

Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; ); Mismatches 1; Indels

;

12; Conservative

Query Match

Local

Matches

3.9%;

```
ACC68806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of a gene chip; in vitro as (anti)sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration,
                                                                                                                                                                                                                                                                                                                               New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Murine oligonucleotide associated with tumour supression, SEQ ID 875.
                                                                                                                                                                                                                                                                                                                                                                                                                            The present invention relates to murine oligonucleotides (ACC62754-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 11 A; 2 C; 3 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 262; 738pp; French.
                                                                                                                                                                                                                                                                      Tuijnder M;
                                                                                                                                                                                                                                    (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                         17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                       17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEP-2002; 2002WO-IB004210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACC63628 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                834 TITICITICA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               m
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTTCTTTCTGA
                                                                                                                                                                                                                                                                      Amson R,
                                                                                                                                                                                                                                                                                                  WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Best Local Similarity
                                                schizophrenia; ss
                                                                                                           WO2003025176-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003025176-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  schizophrenia;
                                                                              Mus musculus
                                                                                                                                                                                                                                                                     Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 musculus
                                                                                                                                          27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mus
   à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Db
```

```
The present invention relates to murine oligonucleotides (ACC62754-ACC8806), which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying and/or amplifying nucleic acid, e.g. as one component of agenc chip; in virco as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                              New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine; tumour suppression; tumour reversion; apoptosis; virus resistance; viral disease; tumour; cell degeneration; cancer; Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Murine oligonucleotide associated with tumour supression, SEQ ID 2110.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 6 A; 2 C; 4 G; 5 T; 0 U; 0 Other;
                                                                                                                                                                               Disclosure; Page 133; 738pp; French
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 277; 738pp; French.
                                                    Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tuijnder M;
                                                   Tuijnder
                 (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACC64863 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              974 AAATCTGGTGTAT 986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAAACTGGTGTAT 17
                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 92.3 tes 12; Conservative
                                                 relerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Amson R,
                                                                                 WPI; 2003-333167/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2003-333167/31.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              schizophrenia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003025176-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        27-MAR-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             'n
                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC64863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACC64863
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        g
```

ö

Gaps

0

The present invention relates to murine oligonucleotides (ACC62754-

17-SEP-2001; 2001FR-00011979

·: 0

Gaps

·. 0

Indels

5

Mismatches

1;

12; Conservative

Matches

. 0

```
The present invention relates to murine our supression, true associated with tumour suppression, tumour reversion, which are associated with tumour suppression, tumour reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of gene chip, in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that of pharmaceuticals for prevention and/or treatment of viral diseases that
                reversion, apoptosis and virus resistance. The oligonucleotides are useful as (1) as probes and primers for detecting, identifying, quantifying and/or amplifying nucleic acid, e.g. as one component of gene chip; in vitro as (anti) sense reagents; and (2) for production of recombinant polypeptides. The oligonucleotides are useful for preparation of pharmaceuticals for prevention and/or treatment of viral diseases that are characterised by development of tumours or cell degeneration, specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New isolated nucleic acid, useful for treating viral diseases associated with tumors and cell degeneration, also related polypeptides, antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cytostatic; virucide; neuroprotective; nootropic; neuroleptic; murine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tumour suppression, tumour reversion, apoptosis, virus resistance; viral disease, tumour, cell degeneration, cancer, Alzheimer's disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Murine oligonucleotide associated with tumour supression, SEQ ID 973.
                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    present invention relates to murine oligonucleotides (ACC62754-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     specifically cancer but also Alzheimer's disease and schizophrenia
                                                                                                                                                                                                                                                                              ..
0
                                                                                                                                                                                                                                       Length 17;
                                                                                                                                                                                                                                                                            Indels
ACC68806), which are associated with tumour suppression,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 5 A; 7 C; 2 G; 2 T; 0 U; 1 Other;
                                                                                                                                                                                                Sequence 17 BP; 3 A; 4 C; 4 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                     Score 11.4; DB 1;
Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 144; 738pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tuijnder M;
                                                                                                                                                                                                                                                                                .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (MOLE-) MOLECULAR ENGINES LAB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-2001; 2001FR-00011979.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17-SEF-2002; 2002WO-IB004210.
                                                                                                                                                                                                                                         3.98;
                                                                                                                                                                                                                                                            92.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACC63726 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                      CTGGCTCCAGTTG 869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                         Crcacrccagrig 16
                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 and transfected cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-333167/31.
                                                                                                                                                                                                                                                            Local Similarity
les 12; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   schizophrenia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO2003025176-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mus musculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                relerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           01-JUL-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-MAR-2003.
                                                                                                                                                                                                                                                                                                                        857
                                                                                                                                                                                                                                                                                                                                                             4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACC63726;
                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1136
                                                                                                                                                                                                                                                                  Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                           ACC63726/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 q
    5555555555%&
                                                                                                                                                                                                                                                                                                                          ð
```

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as recombinant models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or disease characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease can be used for diagnosis. Analysis of the expression of the nucleotides can be used for diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ö
                                                                                                                                                                                                                                                                                         cytostatic, antiviral, neuroprotective, nootropic, neuroleptic, ss;
primer, probe, tumour suppression, tumour reversion, apoptosis;
virus resistance, transgenic animals, Alzheimer's disease, schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and/or prognosis of these diseases. The nucleotides and polypeptides can also be used to screen for their specific interactive molecules,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 11.4; DB 1; Length 17; Pred. No. 7.4e+02; 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                      Tumour suppression/reversion associated nucleotide #2161.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 6 A; 1 C; 7 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Disclosure; Page 284; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ξ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     potentially useful for treatin
expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.9%;
                                                                                                                               ADB41838 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17-SEP-2001; 2001FR-00011981.
 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
858 TGGCTCCAGTTGGAA
                                    17 redmrecaerredea
                                                                                                                                                                                                        (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                            WO2003040369-A2.
                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman A,
                                                                                                                                                                                                        18-DEC-2003
                                                                                                                                                                                                                        04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                         diagnosis.
                                                                                                                                                                     ADB41838;
                                                                                              RESULT 1137
                                                                                                                                                  à
                                      g
```

766 CCTCCACTTCTGA 778

ð

Length 17;

Score 11.4; DB 1; Pred. No. 7.4e+02;

3.9%;

Query Match Best Local Similarity

ADB41598 standard; DNA; 17 BP

RESULT 1139

ADB41598

ADB41598;

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides. Or the complement, or corresponding RNA, of the conditions are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleotides are used as probes or primers for detecting, sense and antisense sequences, of nucleotides involved in tumour sense and antisense sequences, of nucleotides involved in tumour recombinant polypeptides, and to prepare transagenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies of viral infections or diseases characterized by development of tumours or viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzhehmer's disease or schizophrenia).
                                                                                                                                                                                                                                                                           cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                             Tumour suppression/reversion associated nucleotide #1560.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 17 BP; 7 A; 2 C; 2 G; 6 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Disclosure; Page 214; 771pp; French.
                                                                                                           ADB41237 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          expression of the nucleotides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-SEP-2002; 2002WO-IB004219;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                      (first entry)
CTCAACTTCTGA
                                                                                                                                                                                       (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                           WO2003040369-A2
                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens.
                                                                                                                                                                                 18-DEC-2003
04-DEC-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                               15-MAY-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Telerman A,
                                                                                                                                                                                                                                                                                                                                       diagnosis.
                                                                                                                                              ADB41237;
                 15
                                                                                          ADB41237
                 셤
```

Tuijnder

also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal ., 3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels and/or prognosis of these diseases. The nucleotides and Sequence 17 BP; 6 A; 8 C; 1 G; 2 T; 0 U; 0 Other; expression of the nucleotides. 92.3%; 920 CATCACCACCACC 932 Query Match 3.9 Best Local Similarity 92.3 Matches 12; Conservative ö Gaps

·: Gaps 5 CATAACCACCACC 17

ADB41111

; 0

3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ive 0; Mismatches 1; Indels

ð

12; Conservative

Local Similarity

Query Match Best Loca Matches

The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding RNA, of the nucleotides for the nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour sense and antisense sequences, of nucleotides involved in tumour recombinant polypeptides, and to prepare transgenic animals, as recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing the nucleotides (also vectors containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatments or a vector or animal of tumours or a vector or animal of tumours or animal or primer, probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia; polypeptides can or cell degeneration (e.g. Alzheimer's disease or schizophrenia). Analysis of the expression of the nucleotides can be used for diagnosis New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies. antiviral; neuroprotective; nootropic; neuroleptic; ss; Tumour suppression/reversion associated nucleotide #1921. Disclosure; Page 256; 771pp; French. Ξ Tuijnder (MOLE-) MOLECULAR ENGINES LAB. 17-SEP-2002; 2002WO-IB004219. 17-SEP-2001; 2001FR-00011981. (revised)
(first entry) Amson R, WPI; 2003-441574/41 WO2003040369-A2 Homo sapiens. 18-DEC-2003 04-DEC-2003 cytostatic; Telerman A, diagnosis. RESULT 1140 

(revised)
(first entry)

18-DEC-2003 04-DEC-2003

ADB41111 standard; DNA; 17 BP.

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, or the complement, or corresponding RNA, of the nucleotides. The nucleotides are used as probes or primers for detecting, identifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as recombinant models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and only properties can be used for diagnosis and the containing models. The nucleotides can be used for diagnosis and the containing the containing the recombiner's disease or schizophrenia).
                                                                                                                                                                    cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                               Tumour suppression/reversion associated nucleotide #1434.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 1 A; 4 C; 1 G; 11 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Disclosure; Page 199; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         expression of the nucleotides
                                                                                                                                                                                                                                                                                                                                                                                                                                   17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               832 ICTTTTTCTTCT 844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rcrrrrrrrrcrcr 15
                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Telerman A, Amson R,
                                                                            (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                WO2003040369-A2.
                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          12;
                                                                            18-DEC-2003
                                                                                                                                                                                                                                                                                                                                                       15-MAY-2003
                                                                                              04-DEC-2003
                                                                                                                                                                                                                                    diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                    ADB41111;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
à
```

Tuijnder M;

```
The invention relates to the isolation of 6327 nucleotide sequences, fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence haring at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides, or the complement, or corresponding NNA, of the nucleotides, The nucleotides are used as probes or primers for detecting, identifying, quantifying and/or amplifying nucleic acids, as in vitro sense and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce recombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and earlies ontaining the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections of diseases characterized by development of tumours
                                                                                                         cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss; primer; probe; tumour suppression; tumour reversion; apoptosis; virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and/or prognosis of these diseases. The nucleotides and polypeptides can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               or cell degeneration (e.g. Alzheimer's disease or schizophrenia).
Analysis of the expression of the nucleotides can be used for diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels
                                                                     Tumour suppression/reversion associated nucleotide #4468.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 8 A; 3 C; 5 G; 1 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Disclosure, Page 554; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tuijnder M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BP.
                                                                                                                                                                                                                                                                                                                                                                                                         (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                  17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                                                                     17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 useful e.g. for treatment or polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADB44939 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         834 TTTTCTTCTGA 846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 92.3
Matches 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman A, Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WPI; 2003-441574/41.
                                                                                                                                                                                                                                                     WO2003040369-A2.
                                                                                                                                                                                                                   Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18-DEC-2003
                                                                                                                                                                                                                                                                                          15-MAY-2003.
                                                                                                                                                                          diagnosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADB44939;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1142
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ADB44939
1XXXXXX
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               qq
```

oʻ

.; 0

Gaps

0;

3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; ve 0; Mismatches 1; Indels

92.3%;

ADB44145 standard; DNA; 17 BP.

RESULT 1141

ADB44145,

ADB44145

AXB

Tumour suppression/reversion associated nucleotide #5262.

```
fragments of at least 15 consecutive nucleotides of these nucleotides, a fragments of at least 15 consecutive nucleotides of these nucleotides, a sequence having at least 80% identity, after optimal alignment, with the nucleotides, a sequence that hybridizes under stringent conditions with the nucleotides. Or the complement, or corresponding RNA, of the complement, or corresponding RNA, of the nucleotides are used as probes or primers for detecting, identifying and/or amplifying nucleotides in tumour censes and antisense sequences, of nucleotides involved in tumour suppression or reversion, apoptosis and or viral resistance, to produce cecombinant polypeptides, and to prepare transgenic animals, as experimental models. The nucleotides (also vectors containing them and cells containing the vectors), the encoded polypeptides and antibodies (Ab) against the polypeptide are useful for prevention and/or treatment of viral infections or diseases characterized by development of tumours or cell degeneration (e.g. Alzheimer's disease or schizophrenia).

Analysis of the expression of the nucleotides can be used for diagnosis and/or prognessis of these diseases. The nucleotides can an polypeptides can all or prevention and polypeptides can all or prognessis of these diseases. The nucleotides can and polypeptides can all or preventions and polypeptides can al
                                                cytostatic; antiviral; neuroprotective; nootropic; neuroleptic; ss;
primer; probe; tumour suppression; tumour reversion; apoptosis;
virus resistance; transgenic animals; Alzheimer's disease; schizophrenia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          New nucleic acid encoding human prostate membrane-specific antigen, useful e.g. for treatment of tumors and viral infection, also related
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           also be used to screen for their specific interactive molecules, potentially useful for treating diseases associated with abnormal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ch 3.9%; Score 11.4; DB 1; Length 17; l Similarity 92.3%; Pred. No. 7.4e+02; 12; Conservative 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene therapy; antibody therapy; modulator of GAPN; GTP-activator for Rab-like GTPase; GAP_N; immunogen; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 5 A; 7 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No. 7.46
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure; Page 647; 771pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Human GAP_N DNA 17-mer oligo #10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            (MOLE-) MOLECULAR ENGINES LAB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 expression of the nucleotides.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADD20778 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                      17-SEP-2002; 2002WO-IB004219.
                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-2001; 2001FR-00011981.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       useful e.g. for treatment o
polypeptide and antibodies.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  796 CCAAGAGCTCTCC 808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4 CCAACAGCTCTCC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Amson R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 2003-441574/41.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                          WO2003040369-A2
                                                                                                                                                                                       Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Telerman A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15-JAN-2004
                                                                                                                               diagnosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADD20778;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADD20778,
q
```

```
The invention relates to an isolated human GTP-activator protein for Rablike GTPase (GAPN) polypeptide (I), a sequence having 65% identity to (I), a sequence in which at least 95% of deviations from (I) are conservative substitutions, or a fragment of at least 8 contiguous amino acids of (I). The polypeptide is useful for identifying a specific binding partner for itself, by contacting the polypeptide in vivo to a potential binding partner and determining if the polypeptide in vivo to a potential binding partner and determining if the polypeptide binding partner binds to the polypeptide (I) and a nucleic acid encoding the polypeptide (II) are useful for diagnosing or monitoring a disease caused by altered expression of GAPN, by determining the level of expression of GAPN, by determining the level of expression of GAPN in a sample of mucleic acids or protentins that derives from a subject companie of (I) is useful for treating or preventing a disorder corresponds of (I) is useful for treating or preventing a disorder associated with increased expression or activity of GAPN, and an ansociated with increased expression or activity of GAPN, and an associated with increased expression or activity of GAPN, and an associated with increased expression or activity of GAPN, and an anormal expression of an associated with increased expression or activity of GAPN, and an anormal and an apprehens. (II) is useful to raise antibodies that specifically are recognize GAPN proteins. (II) is useful to raise antibodies that specifically crossing and as hybridization probes to detect. characterize and quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both represents a 17-mer oligonucleotide spanning the GAPN NAN sequence.
                                                                                                                                                                                                                                                                                                                                                                                              Novel human GTP-activator protein for Rab-like GTPase and polynucleotide encoding the protein, useful for diagnosing, treating or preventing disorders associated with increased expression or activity of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.4; DB 1; Length 17; 92.3%; Pred. No. 7.4e+02; tive 0; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene therapy, antibody therapy, modulator of GAPN, GTP-activator for Rab-like GTPase, GAP_N, immunogen; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 1 A; 6 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 2; SEQ ID NO 34; 149pp; English.
                                                                                                                                                                                                                                                       (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human GAP_N DNA 17-mer oligo #11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ADD20779 standard; DNA; 17 BP.
                                                                                                                                                            11-OCT-2002; 2002WO-US032597.
                                                                                                                                                                                                           15-OCT-2001; 2001US-0330323P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               704 CCAGCGAGTCCCA 716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15-JAN-2004 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 92.3
Les 12; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14 ccascescrecca 2
                                                                                                                                                                                                                                                                                                                                                 WPI; 2003-403224/38.
                                                               WO2003033703-A2
                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                24-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ADD20779;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                        Zhang J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ADD20779,
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ô
```

0;

Gaps

.**.** 

1; Indels

W09616974-A1.

```
Novel human GTP-activator protein for Rab-like GTPase and polynucleotide encoding the protein, useful for diagnosing, treating or preventing disorders associated with increased expression or activity of the
                                                                                                                                       Example 2; SEQ ID NO 35; 149pp; English.
                                                             (AMSH ) AMERSHAM BIOSCIENCES SV CORP.
                                 11-OCT-2002; 2002WO-US032597.
                                               15-OCT-2001; 2001US-0330323P.
                                                                                        WPI; 2003-403224/38.
     WO2003033703-A2.
                    24-APR-2003
                                                                          Zhang J;
                                                                                                                          protein.
```

```
The invention relates to an isolated human GTP-activator protein for Rablike GTPase (GAPN) polypeptide (I), a sequence having 65% identity to like GTPase (GAPN) polypeptide (I), a sequence having at least 95% of deviations from (I) are conservative substitutions, or a fragment of at least 8 contiguous amino acids of (I). The polypeptide is useful for identifying a specific binding partner for itself, by contacting the polypeptide in vivo to a conservative binds partner and determining if the polypeptide binding partner binds to the polypeptide (I) and a nucleic acid encoding the comparison of cappending of GAPN, by determining if the polypeptide binding partner binds to the polypeptide (I) and a nucleic acid encoding the comparison of GAPN in a sample of nucleic acids or proteins that derives from a subject suspected to have the disease, alterations from a normal level of suspected to have the disease, alterations from a normal level of cappending diagnostic and/or monitoring information. (I), (II) or associated with decreased expression or activity of GAPN, and an antagonist of (I) is useful for treating or preventing a disorder associated with increased expression or activity of GAPN, and an antagonist of (I) is useful for treating or preventing a disorder capponist of (I) is useful for treating or preventing a disorder associated with increased expression or activity of GAPN (all claimed).

(I) is useful as immunogen to raise antibodies that specifically capponents and as hybridiation probes to detect, characterize and quantify GAPN nucleic acids in and isolate GAPN nucleic acids from both genomic and transcript-derived nucleic acid samples. This sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 1 A; 7 C; 6 G; 3 T; 0 U; 0 Other;
```

```
ö
                                                  Gaps
Query Match
Best Local Similarity 92.3%; Pred. No. 7.4e+02;
Matches 12; Conservative 0; Mismatches 1; Indels
```

셤

AAT30557 standard; DNA; 19 BP. (first entry) 11-FEB-1997 AAT30557; RESULT 1145 AAT30557 

Probe JH3 for HNK-20 Jheavy chain coding sequence.

Antibody, HNK-20; variable heavy chain; hybridoma; murine; IgA; mouse; F glycoprotein; respiratory syncytial virus; RSV; constant region gene; chimeric antibody; isotype-switched antibody; therapy; infection; human; pneumonia; bronchiolitis; animal; polymerase chain reaction; probe; ss. Synthetic

AATJ0546-T30558 represent probes for the J chains of an antibody produced by the hybridoma cell HNK-20. AATJ0555-T30558 represent probes for the Upeav chain of the HNK-20 antibody. HNK-20 is a murrine hybridoma cell into, that produces IgA specific for the F glycoprotein of respiratory into that produces IgA specific for the F glycoprotein of respiratory syncytial virus (RSV). The variable chain coding sequences (see AATJ0456-T30458) were isolated using primers specific for the 5' untranslated region of the variable region, and for the intron downstream of the creation of the variable region, and for the intron downstream of the creation genes, for the production of chimearic and isotype-switched antibodies. The antibodies are useful in the treatment and diagnosis of infection by RSV, such as pheumonia and bronchiolitis, in humans and antibodie and producing tragments that have to be adapted for recombinant antibody expression. Also, by using the genomic DNA, no crecombinant antibodies produced from the encoded protable region is required chimeric antibodies produced from the encoded protable region; is a required continent antibodies produced from the encoded protable region is required. DNA encoding variable region of antibody HNK-20 - for treating respiratory syncytial virus infection. Example; Page 55; 75pp; English. 94US-00348548. 95WO-US015716 . ن Kraehenbuhl WPI; 1996-286826/29. (ORAV-) ORAVAX INC. 01-DEC-1995; 01-DEC-1994; 06-JUN-1996. Berdoz J, 

Gaps ., Query Match 3.9%; Score 11.4; DB 1; Length 19; Best Local Similarity 92.3%; Pred. No. 8.3e+02; Matches 12; Conservative 0; Mismatches 1; Indels

Sequence 19 BP; 3 A; 8 C; 5 G; 3 T; 0 U; 0 Other;

cause adverse immune reactions

contain the constant region of the host being treated, are less likely to

ö

d

ð

(first entry) Sindbis virus Bsu site. 25-MAR-2003 (revised) 06-SEP-1999 (first en AAX59308; 

AAX59308 standard; DNA; 16 BP.

RESULT 1146 AAX59308 Alphavirus; infection; cancer; autoimmune disease; gene therapy; vaccine; packaging cell line; hygromycin resistance; selectable marker; PCR; primer; ss.

Sindbis virus. WO9738087-A2.

97WO-US006010. 04-APR-1997; 16-OCT-1997.

```
AAV46944 standard; DNA; 16
                                                                                                                                                                    10-NOV-1998 (first entry)
                        Dubensky TW, Polo JM,
Frolov I;
                                 WPI; 1997-512707/47.
                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                      Key
modified_base
         12-JUL-1996;
   05-APR-1996;
      24-JUN-1996;
                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                        WO9823294-A1
                                                                                                                             13;
                                                                                                                                                                                             Synthetic
                                                                                                                                                              AAV46944;
                                                                                                                                                 Matches
à
                                                                                                                                        임
```

```
human adenosine A1 receptor, the design of which required the secondary structure of this targets mRNA. The adenosine receptor mRNA secondary structure of this targets mRNA. The adenosine receptor mRNA secondary structure was both analysed and used to construct antisense oligonucleotides containing a phosphorothicate backbone. Once the antisense molecules are created they can be used to target their predetermined target, thus causing the gene product to decrease. The antisense oligonucleotides were targeted to specific mRNA regions containing either a junction between the intron and exon, or where they may overlap the initiation codon. The receptors is a member of the G-protein coupled family of cell surface receptors that have 7-protein coupled family of cell surface receptors that have 7-protein conditions associated with bronchoconstriction and/or lung inflammation in humans or other animals e.g. asthma, pulmonary disease, allergy, emphysema and cystic fibrosis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the
                                                                                                                                                                                                                                                                                                        Treating respiratory disease with antisense sequences directed against adenosine or bradykinin receptors - with localised delivery to the respiratory system, suitable for long term treatment of asthma, adult respiratory distress syndrome etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasconstriction; inflammation; allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human adenosine Al receptor antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.9%; Score 11.2; DB 1; Length 16; 31.2%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 16 BP; 6 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 12; Page 8-24; 47pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         807 CCTCCAACTCAGGGTT 822
                                                  97WO-US022017.
                                                                                                    96US-00757024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81.2%;
                                                                                                                                                    (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX53321 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 3.9°
Best Local Similarity 81.2°
Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16 ccrccarcrcagcrrr
                                                                                                                                                                                                                                                         WPI; 1998-322464/28
                                               26-NOV-1997;
                                                                                                  26-NOV-1996;
04-JUN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX53321;
                                                                                                                                                                                                         Nyce JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX53321
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This oligonucleotide comprises the Bsu site (nucleotides 8887-8902) of Sindbis virus. Defective helper structural protein constructs of the invention can contain an intact or deleted form of this sequence. Such constructs can be used in the construction of alphavirus packaging cell lines with 'hybrid' structural proteins comprising sequences from other alphaviruses or togaviruses. The present invention provides alphavirus-consequences with reduced inhibition of cellular macromolecular synthesis. Alphavirus vector constructs, replicons and eukaryotic layered vector initiation systems of the invention are used: (i) to deliver a selected heterologous sequence, particularly in gene therapy for treatment of a wide range of infections, cancers, and autoimmune causes, or to regulate the immune system; (ii) as vaccines; (iii) to inhibit pathogens; and (iv) to express heterologous products (therapeutic proteins, ribozymes, and antisense sequences). Since the modified vectors of once cause significant inhibition of host cell biosynthesis, they can correct PI field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       °,
                                                                                                                                                                                                                                                                                                                Nucleic acid comprising altered alpha-virus non-structural protein gene -
useful for generating expression cassettes for production of recombinant
proteins in vertebrate or insect cells.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Secondary structure; mRNA; phosphorothioate backbone; G-protein; bronchoconstriction; lung inflammation; asthma; pulmonary disease; allergy; emphysema; cystic fibrosis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Antisense oligonucleotide 444, targeting adenosine Al receptor.
                                                                                                                                                                                                    Dryga SA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.2; DB 1; Length 16;
81.2%; Pred. No. 7.46+02;
rative 0; Mismatches 3; Indels
                                                                                                                                                                                      Belli BA, Schleisinger S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 16 BP; 2 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                     Example 6; Page 164; 309pp; English.
          96US-00628594.
96US-00668953.
96US-00679640.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              873 CACTITCCIGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВР
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 cacegrecreageree 16
                                                                                                            (CHIR ) CHIRON VIAGENE INC. (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
```

ó

Gaps ·;

Indels

prostate cancer; ss.

WO9913886-A1 25-MAR-1999.

Synthetic

/*tag= a /note= "contains phosphorothioate internucleotide

linkaqes"

Location/Qualifiers

(UNIW ) UNIV WASHINGTON.

```
The specification describes antisense oligomucleotides (AAX52869-X55271)

directed against at least 2 mRNAs selected from target genes, coding and
con-coding regions of RNAs corresponding to target genes, coding and
codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
codons, genomic flanking regions, intron-exon borders, the 6'-end, the 3'
conditions or mixtures. The antisense oligomucleotides may be derived
from sequences AAX5512-74. These multiple target oligomucleotides
conditions or mixtures. Typical diseases and conditions are those
cassociated with impaired respiration and inflammation, including lung
diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
catute asthma, allergies, asthma, impeded respiration, respiratory
distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
cature asthma, allergies, asthma, impeded respiration, respiratory
distress (COPD), and cancers such as leuvenias, lymphomas, carcinomas e.g.
colon cancer, breast cancer, lung cancer, melanoma, hepatic metastases, as
the lank as all types of cancers which may metastasize or have metastasized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alphavirus; infection; cancer; autoimmune disease; gene therapy; vaccine; packaging cell line; hygromycin resistance; selectable marker; PCR; primer; ss.
                                                                                                                                                                                                     New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 7.4e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                to the lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 16 BP; 6 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                          Disclosure; Page 34; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   807 CCTCCAACTCAGGGTT 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX58555 standard; DNA; 16 BP.
                                      97US-0059160P.
98US-00093972.
98WO-US019419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16 cciccarcicaecrir 1
                                                                                             (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sindbis virus Bsu site.
                                                                                                                                                                  WPI; 1999-229400/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                          vasoconstriction
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16-AUG-1999
                                          17-SEP-1997;
                                                           09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAX58555;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                    Nyce JW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX58555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT
     ö
```

```
This oligonucleotide comprises the Bsu site (nucleotides 8887-8902) of Sindbis virus. Defective helper structural protein constructs of the invention can contain a intact or deleted form of this sequence. Such constructs can be used in the construction of alphavirus packaging cell lines with hybrid structural proteins comprising sequences from other alphaviruses or togaviruses. The present invention provides alphavirus-capthesis. Alphavirus vector constructs, replicons and eukaryotic layered vectors with reduced inhibition of cellular macromolecular synthesis. Alphavirus vector constructs, replicons and eukaryotic layered vector initiation systems of the invention are used: (i) to deliver a selected heterologous sequence, particularly in gene therapy for treatment of a wide range of infections, cancers, and autoimmune treatment of a wide range of infections, cancers, and autoimmune continuity in packages, or to regulate the immune system; (ii) as vaccines; (iii) to diseases, or to regulate the immune system; (ii) as vaccines; (iii) to proteins, ribozymes, and antisense sequences). Since the modified vectors on out cause, significant inhibition of host cell biosynthesis, they can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human, adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergy; disease; bronchoconstriction; inhibitor; antiinflammatory; antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
                           Dryga SA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.2; DB 1; Length 16;
81.2%; Pred. No. 7.4e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Low adenosine antisense oligonucleotide SEQ ID NO:453.
                                                                                                                                  Alphavirus vectors with reduced cytopathic effects.
                              Dubensky TW, Polo JM, Belli BA, Schlesinger S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 16 BP; 2 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               do not cause significant inminitude or be used safely as gene therapy vectors
                                                                                                                                                                             Example 6; Page 172; 235pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA32764 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              873 CACTITICCIGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99WO-US017712.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cacegreereageree 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13; Conservative
                                                                                            WPI; 1999-264032/22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best_Local Similarity Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO200009525-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      03-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28-JUL-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24-FEB-2000.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAA32764;
                                                         Frolov I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nyce JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA32764/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

0;

Gaps

·;

WPI; 2000-205971/18

98WO-US021062. 97US-00944465.

06-OCT-1998; 06-OCT-1997;

LS-APR-1999.

Sindbis virus WO9918226-A2 (CHIR ) CHIRON CORP.

; 0

```
New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or
                                    Claim 18; Page 324; 1343pp; English.
                         cancers.
                                                                                                                                                                                                  listing
```

The present invention describes a new composition comprising an antisense oligonuclectide (ON) with low adenosine (up to 15%), which targets nuclect acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergies, and/or antiathmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating impeded respiration, pulmonary vasconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including the east and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONs break down with the release of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA2313 to AAA3512 represent the nucleotide sequences given in the sequence listing from the present the invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:1 to 186 (AAA33233 to AAA33922) are specifically claimed ONS from the present invention. N. B. Sequences given in the disclosure of the present invention do not match up with their corresponding SEQ ID NO: sequences given in the sequence

Sequence 16 BP; 6 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

3.9%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 7.48+02; Live 0; Mismatches 3; Indels 822 16 CCTCCATCTCAGCTTT 1 Query Match
Best Local Similarity 81.2' 807 CCTCCAACTCAGGGTT ð

ö

Gaps

0

AAA03123 standard; DNA; 16 BP. AAA03123; RESULT 1151 

19-MAY-2000 (first entry)

Human adenosine Al receptor antisense oligonucleotide SEQ ID NO:407

Human; adenosine Al receptor; antisense oligonucleotide; hypoxia; adenosine As receptor; adenosine A3 receptor; abnosine A3 receptor; phosphorothicate; cardiopulmonary failure; renal failure; ischaemia; endotoxin release; ARDS; acute respiratory distress syndrome; cytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic; charactala; allergic; anti-inflammatory; anti-hypoxic; chronic obstructive pulmonary disease; ss.

Homo sapiens Synthetic.

WO9963938-A2

16-DEC-1999

99WO-US012775 08-JUN-1999;

98US-0088501P 08-JUN-1998;

```
98US-00093972.
98US-0088657P.
09-JUN-1998;
              09-JUN-1998;
```

(EPIG-) EPIGENESIS PHARM INC

Hill JL; Nyce JW, WPI; 2000-116433/10

Novel composition for treating or preventing e.g. cardiopulmonary and

renal injury.

Claim 17; Page 30; 252pp; English

The present invention describes a pharmaceutical composition, comprising at least one agent (I) that prevents, alleviates and/or inhibits adenosine mediated cardiopulmonary and/or renal damage and/or failure.

(I) is an adenosine Aza receptor agonist (Ia), or an oligonucleotide (Ib), containing less than 15% adenosine (A), that is antisense to target genes or corresponding RNA, to genomic flanking regions (i.e. 5. or 3' ends or segments between coding and non-coding sequences), or to all segments of mRNA encoding and non-coding sequences), or to all has Al, Azb or A3 agonist activity or Aza antagonist activity for at least no agonist activity or Aza antagonist activity or at least no aponist activity at this receptor). (I) may be a mixture of (Ia) and optionally also contains one or more surfactants. The compositions are used to prevent, alleviate and/or treat adenosine receptor-mediated cardiac, lung and/or renal damage or failure farming and/or renal damage or failure pulmonary disease; cardiopulmonary hypoxia associated with administration of stress-test agents, particularly where such conditions are associated with acute inflammation. AAA02717, AAA02719, AAA02712 and AAA02723 to AAA03715 represent specifically claimed phosphorothioate antisense oligonucleotides for use in the composition of the present invention. AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03710 represent invention. phosphorothioate oligonucleotides used in the exemplification of the administration of drugs or imaging agents, e.g. adenosine for treating supraventricular tachycardia); (adult) respiratory distress syndrome (e.g. associated with sepsis); allergic rhinitis; chronic obstructive present invention

Seguence 16 BP; 6 A; 1 C; 7 G; 2 T; 0 U; 0 Other;

; 0 3.9%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 7.4e+02; ative 0; Mismatches 3; Indels Query Match 3.9 Best Local Similarity 81.2 Matches 13; Conservative

ò

Gaps

à

AAF18886/c ID AAF18886 standard; DNA; 16 RESULT 1152 

BP

AAF18886;

14-MAR-2001 (first entry)

Human adenosine Al receptor polynucleotide fragment #453.

respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis; Low adenosine antisense oligonucleotide, phosphorothioate, allergy, human, airway disorder, bronchoconstriction, lung inflammation, surfactant depletion, respiratory, bronchodilator, antiinflammatory, immunosuppressive, antiasthmatic, analgesic, hypotensive, cytostatic,

Homo sapiens

```
consumerectures the a is replaced by a controlled of all controlled by bronchooliator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligomucleotides and (1) can be used to down-regulate the expression and or activity of target polypeptides associated with expression and or activity of target polypeptides associated with controlled procession and or activity of target polypeptides such as stimulating and cativating peptide factors and antiphodies, such as stimulating and chemokines, endogenously produced specific and non-specific enzymes, chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adenosine receptors, cytokines and chemokine receptors, adenosine receptors, prokaine and chemokine receptors, and peripheral nervous and non-nervous system creceptors, and peripheral nervous and non-nervous system peptide cransmitters, defensins, growth factors, vasoactive peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligomucleotides and malignancy associated proteins. The antisense oligomucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction and/or bronchoconstriction) and/or lung inflammation, allergy (ies) and/or condition entered by a sessociated with a disease or condition and processes or conditions.
                                                                                                                                                                                                                                                                                                                                                                           Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 fragments and antisense oligonucleotides used in the exemplification of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             condition selected from pulmonary vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome (RDS), pain, cystic fibrosis (CP), allergic fibritis (AR), pulmonary hypertension, emphysema, chronic obstructive pulmonary desase (COPD) pulmonary transplantation respection, pulmonary infections, bronchitis, and/or cancer. AAF18434 to AAF21543 represent human polynucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ouery Match 3.9%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 7.4e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 16 BP; 6 A; 1 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    West nile virus genome, nucleotides 81-96.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 14; Page 113; 1592pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABS56014 standard; RNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   807 CCTCCAACTCAGGGTT 822
                                                                                                                24-MAR-2000; 2000WO-US008020.
                                                                                                                                                                99US-0127958P
                                                                                                                                                                                                               UYEC-) UNIV EAST CAROLINA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ccrccarcrcaecrrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (revised)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             the present invention
                                                                                                                                                                                                                                                                                                                                     WPI; 2000-679539/66.
                                                                                                                                                                                                                                      (NYCE/) NYCE J W.
                    WO200062736-A2.
                                                                                                                                                                  06-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              07-AUG-2003
07-JAN-2003
                                                                   26-OCT-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABS56014;
                                                                                                                                                                                                                                                                                      Nyce JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ABS56014
X X X I I X B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
```

```
flavivirus having a genome with a 3' stem-loop structure substitution, and being defective for replication in an arthropod vector that transmits flavivirus to humans. The genome is selected from a first flavivirus and the 3' stem-loop structure from a second flavivirus, where the first flavivirus and plavivirus is different from the second. For example the first flavivirus may be Dengue virus type 2 (DBN2) and the second flavivirus may be West NN1e virus type 2 (DBN2) and the second flavivirus may be West vaccine for treating flavivirus-induced infections, particularly dengue fever or dengue haemorthagic fever/shock syndrome. The present sequence represents a part of the MY genome used to construct a mutant replication defective flavivirus in the examples of the present invention. (Updated on 07-MUG-2003 to correct OS field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Human; allele-specific base detection; primer extension reaction; base-specific detection primer; allele-specific primer extension assay; AS; high throughput; single nucleotide polymorphism; SNP analysis; mutation detection; genetic variation; allele-specific extension; primer;
                                                                                                                                                                                                                                                                                                                                                                                                                                   stem-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                             New mutant replicon-defective flavivirus having a genome with a 3' s
loop structure chimeric substitution useful as vaccine for treating
flavivirus-induced infection e.g. dengue fever, dengue hemorrhagic
          Mutant replication-defective flavivirus; arthropod vector; 3' stem-loop structure substitution; Dengue virus type 2; DEN2; West Nile virus; WN; flavivirus-induced infection; dengue fever; dengue shock syndrome; virucide; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          The present invention relates to a mutant replication-defective
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 68.8%; Pred. No. 7.4e+02;
Matches 11; Conservative 2; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 16 BP; 4 A; 4 C; 6 G; 0 T; 2 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human genomic DNA p53 codon 72 SNP primer #2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 3; Page 62; 67pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ABX96551 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           737 GGACTTGGTAGGGTCC 752
                                                                                                                                                                                                                                                                          16-MAR-2001; 2001WO-US008686.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GGACCAGAUAGGGUCC 16
                                                                                                                                                                                                                                     16-MAR-2001; 2001WO-US008686.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-MAY-2003 (first entry)
                                                                                                                                                                                                                                                                                                                  (USSH ) US DEPT OF HEALTH.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               fever/shock syndrome.
                                                                                                                                                                                                                                                                                                                                                                                            WPI; 2002-750556/81
                                                                                                               West Nile virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO200268684-A2.
                                                                                                                                                      WO200274963-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens.
                                                                                                                                                                                                26-SEP-2002.
                                                                                                                                                                                                                                                                                                                                                       Markoff L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ABX96551;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1154
셤
```

.**,** 

; 0

Gaps

```
Homo sapiens.
                                              ABZ94580;
                                   Query Match
        (DZIE/)
                                          RESULT 1155
                                           ò
                                        g
```

```
The present invention relates to a method for detecting a base at a predetermined position in a nucleic acid molecule. The method comprises performing primer extension reactions using base-specific detection primers, each being specific for a particular base at the predetermined primers, each being specific for a particular base at the predetermined position. The allele-specific (As) primer extension assay method of the invention is useful for detecting an allele-specific base at a predetermined position in a nucleic acid molecule, for high throughput single nucleotide polymorphism (SNP) analysis, and for detecting mutations and genetic variations. The new method solves the deficiencies of previous methods by providing a method of allele-specific extension that allows accurate discrimination between matched and mismatched configurations, as well as reducing or eliminating false positive results observed in prior art. The use of two allele-specific primers increases the sensitivity by a factor of two because signals of two extensions are between the examples
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Detecting a base at a pre-determined position in a nucleic acid molecule, comprises performing primer extension reactions using base-specific detection primers in the presence of a nucleotide-degrading enzyme.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 16 BP; 2 A; 2 C; 10 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ahmadian A, Nyren P;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 1; Page 26; 59pp; English.
                                                                                                                                                                             2001GB-00004560.
2001US-00791190.
                                                                                                                                                                                                                                                                2002US-00071926.
                                                                                  22-FEB-2002; 2002WO-GB000794
                                                                                                                                                                                                                                                                                                                                                      (PYRO-) PYROSEQUENCING AB.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                    DZIEGLEWSKA H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 2002-707012/76.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lundeberg J,
                                                                                                                                                                                                                                                                07-FEB-2002;
                                                                                                                                                                                                                      23-FEB-2001;
                                                                                                                                                                             23-FEB-2001;
06-SEP-2002
```

```
ö
```

```
Gaps
                                             .
0
3.9%; Score 11.2; DB 1; Length 16; 31.2%; Pred. No. 7.4e+02; ve 0; Mismatches 3; Indels
                                                                           923 CACCACCACCTCCAG 938
                  Best_Local Similarity 81.2%;
Matches 13; Conservative
                                                                                                    16 CACCAGCCCCCTCCTG 1
```

```
Human adenosine Al receptor antisense fragment no.443.
                                                                                                                                                                                                                                                                                                                                                                                     lung inflammation; respiratory disease; ds.
ABZ94580 standard; DNA; 16 BP
                                                                                                                17-OCT-2003 (first entry)
```

antiinflammatory steroid, ubiquinone, antiinflammatory, antiallergic, antiasthmatic, hypotensive, immunosuppressive, cytostatic, gene therapy, antisense gene therapy, respiratory, lung, adenosine sensitivity, adenosine receptor, bronchodilation, bronchoconstriction, lung allergy, antisense; lung dysfunction; nasal airway dysfunction;

```
WO200285308-A2
                            31-OCT-2002.
```

first active agent comprising an oligonucleotide antisense to the intratactive agent comprising an oligonucleotide antisense to the intiation codon, coding region, 5' or 3' end genomic flanking regions, 5' and 3' intron-exon junctions, or regions within 2-10 nucleotides of junctions of genes encoding a polypeptide associated with lung and/or masal airway dysfunction and a second active agent comprising an antiinflammatory steroid and ubiquinone. A composition of the invention has antiinflammatory, antiallergic, antiasthmatic, hypotensive, communosuppressive, and cytostatic activity. The composition may have a use in antisense gene therapy. The composition is useful for treating or preventing a respiratory, lung or malignamic is useful for treating or preventing a respiratory, lung or malignam disease or condition, also antiinflammatory steroid in a subject, for reducing levels of committed and sensitivity to adenosine. Treducing levels of the section bronchodilation, increasing levels of ubiquinone or lung suffactant in a subject, stissue, or treating bronchoconstriction, lung allergies, or a respiratory disease or condition. Note: The sequence data for this patent is not represented in the printed section, in the was obtained in electronic format directly from WIPO Pharmaceutical composition for treating allments associated with impaired respiration, has oligo(s) antisense to specific gene(s) or its corresponding RNAs, and glucocorticoid or non-glucocorticoid steroid or Katz E, Pabalan J, Aguilar D; ٠. 3.9%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 7.4e+02; ive 0; Mismatches 3; Indels 3; Indels Sequence 16 BP; 6 A; 1 C; 7 G; 2 T; 0 U; 0 Other; at ftp.wipo.int/pub/published_pct_sequences Disclosure; SEQ ID NO 9822; 872pp; English. Shahabuddin S; Sandrasagra A, 23-APR-2002; 2002WO-US013135. 807 CCICCAACTCAGGGTT 822 24-APR-2001; 2001US-0286137P. (EPIG-) EPIGENESIS PHARM INC 81.2%; 16 ccrccarcrcaccrrr 1 Conservative WPI; 2003-229219/22. Li Y, Sar Tang L, Query Match Best Local Similarity Matches 13; Conserv ubiquinone. Miller S, Nyce JW, Best Loca Matches 셤

ö Gaps

BP. ABX81509 standard; DNA; 16 (first entry) 23-APR-2003 ABX81509; RESULT 1156 ABX81509

Bukaryotic layered vector initiation system; cytopathic effect; primer; alphaviral nonstructural protein 2; RNA vector replicon; alphavirus RNA; macromolecular synthesis; alphavirus RNA polymerase recognition sequence; 3' polyadenylate tract; cellular macromolecular synthesis; cell death; PCR; ss; human; SV40; bovine growth hormone.

Sindbis vector PCR primer #33.

Sindbis virus US6465634-B1 15-OCT-2002. Synthetic.  Dryga SA;

Schlesinger S,

05-APR-1996

Frolov I;

MIND)

```
The invention relates to a method of making a selected polypeptide which comprises introducing into a cell a eukaryotic layered vector initiation system, maintaining the cell for expression of the selected polypeptide and expressing the selected polypeptide. The eukaryotic layered vector initiation system comprises a 5' promoter that directs synthesis of alphavirus RNA, a bromoter that directs synthesis of transcription of alphavirus RNA, a bucleic acid that operably encodes all four alphaviral nonstructural proteins, a heterologous nucleic acid sequence encoding the selected polypeptide and an alphavirus RNA polymerase recognition sequence. The alphavirus is Sindak virus, Semliki Forest virus, Venezuelan equine encephalitis virus or Ross River virus. The method is useful for making a selected polypeptide. The present sequence represents a Sindbis virus pcr primer.
                                                                                                                                                                                                                                                                                                                                                                                        Making a selected polypeptide comprises introducing into a cell a eukaryotic layered vector initiation system, maintaining the cell for expression of the selected polypeptide and expressing the selected
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ds; interferon regulatory factor; IRF-1; IRF-2; herpes; antiviral; transcription factor; virucide; vaccine; interferon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 3.9%; Score 11.2; DB 1; Length 16; Best Local Similarity 81.2%; Pred. No. 7.4e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 16 BP; 2 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HSV-1 (17+) IRF-1 binding site #20.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 6; Col 107; 162pp; English.
                                                                                                                                                                                                                                                                     Polo JM, Belli BA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (SMIK ) SMITHKLINE BEECHAM CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human herpesvirus 1; strain 17+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   873 CACTITCCIGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99US-00424348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26-MAR-2002; 2002US-00108164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 cacegricinaaegiec 16
                                                96US-00628594
                                                                     96US-00668953.
96US-00679640.
99US-00415868
                                                                                                                        97US-00833148
                                                                                                                                            97US-00944645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADD07235 standard; DNA; 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                             (CHIR ) CHIRON CORP. (UNIW ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                             WPI; 2003-615248/58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US2003104356-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22-NOV-1999;
                                                                                                                                                                                                                                                                          Dubensky TW,
     08-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-JAN-2004
                                                                                                                                                  06-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              05-JUN-2003
                                                   05-APR-1996;
                                                                                                 12-JUL-1996;
                                                                                                                        04-APR-1997;
                                                                                                                                                                                                                                                                                               Frolov I;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a eukaryotic layered vector initiation system, comprising a mucleic acid sequence encoding all four alphaviral comprising a mucleic acid sequence encoding for nonstructural protein 2, such that when the altered sequence encoding for nonstructural protein 2, such that when the altered sequence is operably incorporated into an RNA vector replicon, the time required to reach 50% inhibition of callular macromolecular synthesis in calls is increased, as compared to an RNA vector replicon having a wild-type alphavirus compared to an RNA vector initiation system comprises a 5' promoter which directs synthesis of alphavirus RNA in vivo from cDNA, a 5' which directs synthesis of alphavirus RNA in vivo from cDNA, a 5' sequence which directs transcription of alphavirus RNA, a mucleic acid sequence which operably encodes all four alphavirus RNA, a mucleic acid sequence which operably encodes all four alphavirus nostuctural content of tract. The eukaryotic layered vector initiation system is cuseful for stimulating an immune response within a vertebrate, for protein expression and gene therapy. The system exhibits reduced, delayed or no inhibition of callular macromolecular synthesis, thus permitting its use for protein expression and gene therapy with reduced, delayed or no development of cytopathic effects or call death. This sequence correspondent in the scope of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ss; primer; PCR; eukaryotic layered vector initiation system; alphavirus; Sindbis virus; S.A.AR86 virus; Semliki Forest virus; Venezuelan equine encephalitis virus; Ross River virus.
                                                                                                                                                                                                                                                                                                                                                                                             Eukaryotic layered vector initiation system, for gene therapy, has alphaviral nonstructural protein gene having mutant nonstructural protein 2 gene, which reduces host-cell directed macromolecular synthesis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ..
0
                                                                                                                                                                                                                                                                             Dryga SA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.9%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 7.4e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3; Indels
                                                                                                                                                                                                                                                                          Dubensky TW, Polo JM, Belli BA, Schlesinger S,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 16 BP; 2 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Example 6; Col 105; 161pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              873 CACTITCCIGAGAIGC 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADAS0732 standard; DNA; 16 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sindbis virus PCR primer #45.
                                                                                                      96US-00679640.
97US-00833148.
97US-00944645.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACGGTCCTGAGGTGC 16
          99US-00415900.
                                                                               96US-00668953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                 ) UNIV WASHINGTON.
                                                                                                                                                                                                                                                                                                                                                         WPI; 2003-147073/14.
                                                                                                                                                                                                          (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20-NOV-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US6458560-B1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   01-OCT-2002
          08-OCT-1999;
                                                                                                                                                            06-OCT-1997;
                                                                                                         12-JUL-1996;
04-APR-1997;
                                                                                    24-JUN-1996;
```

ADA50732;

RESULT 1157

ਨੇ В ADA50732

ö

Gaps

6

Berger SL;

```
The invention relates to treating viral infection or reactivation comparising contacting an individual with an antagonist of the interaction comparising contacting an individual with an antagonist of the interaction. Edetween a Herpers Simplex virus (HSV) polymucleotide sequence appearing as ADD07153 and interferon regulatory factor-1 (IRF-1, a transcription isolated HSV polymucleotide comprising ADD07153, a composition comprising a HSV polypeptide involved in viral infection or reactivation, screening for compounds capable of inhibiting specific binding of IRF-1 to IRF-1: FBP (undefined) complex, a compound capable of agonising of IRF-1: TE-1: FBP (undefined) complex, a compound capable of agonising of IRF-1: TE-1: FBP (undefined) complex, a compound capable of agonising of antagonising any compound in IRF-1 and/or interferon consensus sequence. The method is useful for treating infection or reactivation caused by Herpes virus, e.g., HSV-1 or HSV-2 infections and for cytomegalovirus, Epstein Barr virus and zoster virus infection. The HSV polypeptide and polynucleotides may also be useful as the individual vaccines. The present sequence represents an identified viral
                                                             Treating infection or reactivation caused by Herpes virus comprises using antagonist of Herpes Simplex virus polynucleotide sequence and interferon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 16 BP; 4 A; 3 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                             Disclosure; SEQ ID NO 83; 53pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-MAR-2003; 2003WO-KR000564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-MAR-2002; 2002KR-00015708
                                                                                                regulatory factor-1.
                                WPI; 2003-801223/75.
                                                                                                                                                                                                                                                                                                                                                                                                                                               IRF-1 binding site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO2003080672-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29-JAN-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               02-OCT-2003.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADE13206;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1159
ADE13206/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
셤
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
```

Gaps 0; 3.9%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 7.4e+02; ive 0; Mismatches 3; Indels 715 CAGGAGAGTGACTCTG 730 ADE13206 standard; DNA; 16 BP 1 CTGGAAGTGACTCGG 16 81.2%; (first entry) Local Similarity 81.3

humanised antibody; specificity determining residue; SDR; complementarity determining region; CDR; murine monoclonal antibody; antiinflammatory; hepatotropic; virucide; gene therapy; hepatitis B virus infection; PCR primer; ss. Human heavy chain gene CH1 domain PCR primer SEQ ID NO:18.

(APRO-) APROGEN INC.

Hong HJ, Maeng C, Yang G,

2001WO-US000664. 2001WO-US000665.

30-JAN-2001; 30-JAN-2001;

30-JAN-2001;

2001WO-US000666.

28-JAN-2002; 2002EP-00001165

30-JAN-2001; 2001WO-US000667. 30-JAN-2001; 2001WO-US000668. 30-JAN-2001; 2001WO-US000669.

2001WO-US000670

WPI; 2003-876911/81

Jang YK;

Song J,

MS, 성

Jang MH,

Preparing a humanized antibody for preventing or treating hepatitis

antibody comprising selectining a specificity determining a numenised antibody comprising selectining a specificity determining region (CDR) of murine monoclonal antibody heavy chain and light chain variable regions, and gratefing the SDR to at least one of the corresponding amino acid sequences into human settines of the corresponding amino acid sequences into human corresponding acid sequences into human antibody variable regions. Also described: (1) a humanised antibody prepared according to CDR-grafting method, which suppresses the human anti-mouse antibody heavy chain for the heavy chain variable region of hepatitis B virus (HBV) pre-SI antigen, or the humanised antibody light chain for the light chain variable region of HBV pre-SI antigen, or the humanised antibody light chain for the light chain variable region of HBV pre-SI antigen, of HBV pre-SI antigen, (3) an expression vector phurkal27HC or pdCWV-dhfrC-HWKR127 comprising the DNA described above for expressing the humanised antibody has antibody, and (3) conformation of the humanised antibody and vector of (3); (5) a Chinese hamster ovary (CHO) cell line CHO/HWKR127 (Accession Number: KCTC 1019BBP) producing the humanised antibody; and (6) a composition for preventing or treating HBV infection, comprising the humanised antibody has antihilammatory. 0 hepatotropic and virucide activities, and can be used in gene therapy. The composition and method are useful in preventing or treating hepatitis B virus infection. The present sequence represents a PCR primer for a human heavy chain gene CH1 domain, which is used in an example from the virus infection comprises grafting a specificity determining residue of murine monoclonal antibody to the amino acid sequences in human antibody Gaps Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine; present invention describes a method for preparing a humanised 0; 3.9%; Score 11.2; DB 1; Length 16; 81.2%; Pred. No. 7.4e+02; Live 0; Mismatches 3; Indels Human POSHL1 scanning oligonucleotide SEQ ID NO 1116. Sequence 16 BP; 2 A; 6 C; 5 G; 3 T; 0 U; 0 Other; Example 3; SEQ ID NO 18; 67pp; English. hepatotropic and virucide activities, 783 AGCCCCTCTGGTGCCA 798 ABV90403 standard; DNA; 17 BP gene therapy; transgenic; ss. (first entry) 16 AGCACCTCTGGGGGCA Local Similarity 81.3 variable regions. present invention Homo sapiens EP1239051-A2 23-DEC-2002 11-SEP-2002. ABV90403; Query Match RESULT 1160 Best Loca Matches ABV90403 ð

.; 0

23-MAY-2001; 2001US-00864761. 10-OCT-2001; 2001US-0328205P.

```
The invention relates to an isolated SH3 domain (POSH)-like signalling protein 1 (POSHL 1) polypeptide (I), comprising a sequence of 730 amino acids (S1, ABBB3999), a sequence having 65% sequence of dentity to (S1), as equence central procession of the sequence comprising at least 8 contiguous amino acids. C fragment of the sequences comprising at least 8 contiguous amino acids. Human POSHL 1 is a proto-oncogene product that functions as an adaptor protein that interacts with Rho family small GTPsaces as well as downstream components of the signal transduction pathway. (I) is useful as contiding partner. (I) and mucleic acids (II) for identifying a specific binding partner. (I) and mucleic acids (II) c encoding (I) are useful for diagnosing, monitoring disease and treating caused by altered expression of human POSHL1 including diagnosing and cruseful in gene therapy. (II) is useful for constructing microarrays which are useful for measuring and for surveying gene expression and creating care useful for measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of printed specification, but is based on sequence information supplied to bring the by the Buropean Patent Office
                                                                                                                                                       Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; POSHL 1; SH3 domain; POSH-like signalling protein 1; oncogene; Rho GTPase; signal transduction; gene expression; cancer; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
                                                                                                                                                                                                                                            Example 2; SEQ ID NO 1116; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 7.9e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human POSHL1 scanning oligonuclectide SEQ ID NO 1117.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 2 A; 5 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      30-JAN-2001; 2001WO-US000663.
30-JAN-2001; 2001WO-US000664.
30-JAN-2001; 2001WO-US000665.
30-JAN-2001; 2001WO-US000665.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABV90404 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                748 GGTCCCAGGGTCCCTA 763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  gene therapy; transgenic; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-JAN-2002; 2002EP-00001165.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17 ddacccrdddccccra 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity 81.2
nes 13; Conservative
                                                                                                                                   WPI; 2002-684061/74.
                                                        (AEOM-) AEOMICA INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               23-DEC-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EP1239051-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11-SEP-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ABV90404;
                                                                                               Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ABV90404/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
```

ö

Gaps

```
the invention transce to an experience of 730 anthough protein 1 (POSHI 1) polypeptide (1), comprising a sequence of 730 anthough a caids (S1, ABB83999), a sequence having 65% sequence identity to (S1), acids (S1, ABB83999), a sequence having 65% sequence identity to (S1), acids (S1) having 95% deviations, especially conservative substitutions or a fragment of the sequences comprising at least 8 contiguous amino acids. C fragment of the sequences comprising at least 8 contiguous amino acids. C daptor protein that interacts with Rho family small GTPaese as well as deposite that interacts with Rho family small GTPaese as well as downstream components of the signal transduction pathway. (I) is useful c for identifying a specific binding partner. (I) and nucleic acids (II) c caused by altered expression of human PoSHL1 including diagnosing and creating cancer, they useful in the development of vaccines and (II) is treating cancer, they useful in suseful for constructing microarrays which are useful in measuring and for surveying gene expression and creating transgenic non-human animals capable of producing the proteins. The present sequence is that of a scanning oligonucleotide useful in examples of printed specification, but is based on sequence did not form part of the printed specification, but is based on sequence information supplied to berwent by the European Patent Office
                                                                                                                                                                                                                                Novel human SH3 domain (POSH)-like signaling protein 1 polypeptide, POSHL-1, useful for treating disorders associated with decreased expression or activity of human POSHL1.
                                                                                                                                                                                                                                                                                                                                                   The invention relates to an isolated SH3 domain (POSH)-like signalling
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .,
                                                                                                                                                                                                                                                                                                                Example 2; SEQ ID NO 1117; 60pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Beta-6; BTE2F; BTE3F; B1F; B2R; B3R; cell surface receptor; polymerase chain reaction; PCR; amplify; cDNA; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity 81.2%; Pred. No. 7.9e+02;
Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 3 A; 5 C; 7 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             748 GGTCCCAGGGTCCCTA 763
30-JAN-2001; 2001WO-US000668.
30-JAN-2001; 2001WO-US000659.
30-JAN-2001; 2001US-0US00670.
23-MAY-2001; 2001US-00864761.
10-OCT-2001; 2001US-0328205P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 GGACCCTGGGCCCCTA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAQ27641 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag= /
/label= :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /*tag=
/label=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (revised)
                                                                                                                                                                                                   WPI; 2002-684061/74.
                                                                                                                         (AEOM-) AEOMICA INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          modified base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Primer BTE3F.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25-MAR-2003
29-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Synthetic.
                                                                                                                                                                Shannon M;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAQ27641;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ27641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      엄
```

· 0

modified_base

92WO-US007888

17-SEP-1992;

```
ö
                                                                                                                                                                                                                                                                                                                                                                                                                  Nerve damage; treatment; prevention; Parkinson's disease;
Alzheimer's disease; amyotrophic lateral sclerosis; stroke;
diabetic polyneuropathy; toxic neuropathy; taxol; cisplatin; AIDS;
chemotherapy; ddI; ddC; physical injury; cancer;
glial derived neurotrophic factor; screening; polymerase chain reaction;
                                                                                                                                                                                                                                                                                                                                     New integrin beta sub-unit and its nucleic acid - forms hetero-dimers with sub-units alpha-V and alpha-F, useful as a diagnostic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 5 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rat GDNF gene probe 2 PCR primer PD2.
                                                                                                                                                                                                                                                                          Quaranta V, Pytela R;
                                                                                                                                                                                                                        (REGC ) UNIV CALIFORNIA, (SCRI ) SCRIPPS CLINIC & RES CENT.
                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Fig 1B; 43pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                                           91WO-US000236.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       838 CTTCTCTGAAGACAGC 853
                                                                                                                                                            91WO-US000236.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CATCTCCGAAGACGCC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81.2%;
/*tag= c
/label= I
                                            /*tag= d
/label= I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ39121 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 81.2
                                                                                                                                                                                                                                                                                                          WPI; 1992-284332/34.
                           modified base
                                                                                                                                                           11-JAN-1991;
                                                                                                                                                                                           11-JAN-1991;
                                                                                          WO9212236-A1
                                                                                                                                                                                                                                                                          Sheppard D,
                                                                                                                          23-JUL-1992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   25-MAR-2003
04-AUG-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ39121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ3912:
```

ò 셤

WO9306116-A1

01-APR-1993

```
New glial derived neurotrophic factor - used for prevention and treatment of nerve damage and related diseases, e.g. Parkinson's disease,
                                                                                                                                                                                                                                  The sequence is that of a PCR primer PD2 which was used to prepare, by PCR amplification of lambdaZap II76.1 DNA, a probe (2) for regions upstream of the EcoRI site in the rat GDNF gene. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tricholoma matsutake; Lyophyllum shimeji; 18S rRNA; hypha; plant; pine;
                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA probe for detection of Mycorrhiza fungi - contg. complementary sequence binding specifically to Mycorrhiza fungus.
                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /*tag= a
/note= "may be biotin labelled at this point"
                                                                                                                                                                                                                                                                                                                 3.9%; Score 11.2; DB 1; Length 17; ilarity 81.2%; Pred. No. 7.9e+02; Conservative 0; Mismatches 3; Indels
                                                                                                                    Bektesh S;
                                                                                        (SYNT ) SYNTEX-SYNERGEN NEUROSCIENCE JOINT VENTU.
                                                                                                                                                                                                                                                                                         Sequence 17 BP; 3 A; 5 C; 6 G; 3 T; 0 U; 0 Other;
                                                                                                                   Lile J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Probe MP2 for detection of Mycorrhiza fungi.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                  Doherty DH,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure; Page 5; 8pp; Japanese.
                                                                                                                                                                                                           Example; Page 66; 141pp; English
                                 91US-00764685.
91US-00774109.
91US-00788423.
92US-00855413.
                                                                                                                                                                                                                                                                                                                                                                841 CTCTGAAGACAGCGTC 856
                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                       crcreaaccaacarc 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             93JP-00003169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    92JP-00004308
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAQ50405 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (PENL ) PENTEL KK.
(RIKA ) RIKAGAKU KENKYUSHO.
                                                                                                                                                                                     Alzheimer's disease, etc.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                  Collins FD,
                                                                                                                                        WPI; 1993-117459/14
                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1993-347597/44.
                              20-SEP-1991;
08-OCT-1991;
06-NOV-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Key
misc_feature
                                                                    19-MAR-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JP05252999-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             L2-JAN-1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      05-OCT-1993.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                31-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAQ50405;
                                                                                                                  Lin LH,
                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 1164
                                                                                                                                                                                                                                                                                                                                                                                                                                       AAQ50405,
ठ
                                                                                                                                                                                                                                                                                                                                                                                     qq
```

0

```
The sequence MP2 is an example of a probe contg. DNA complementary to nucleic acid of Mycorrhiza fungi. The probe specifically binds to a segment of the 18S rRNA of the RNA-encoding DNA of Mycorrhiza fungi. Such a probe is useful for the detection of Mycorrhiza fungi, esp. that of Tricholoma matsutake or Lyophyllum shimeji, and for detection of rooting or growth of hypha of Mycorrhiza to a host plant, e.g. pine. See also AAQ50404-14
```

Sequence 17 BP; 6 A; 5 C; 4 G; 2 T; 0 U; 0 Other;

Gaps . 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Indels 0; Conservative Query Match Best Local Similarity Matches 13; Conserv

ö

814 CTCAGGGTTGGCTGTG 829 17 crccedarrederrre g

à

RESULT 1165 AAX56906

AAX56906 standard; DNA; 17 BP AAX56906; 

WO9526733 oligonucleoside cleavage compound 1719-1. (first entry) 15-JUL-1999

Cleavage; oligonucleoside; target; inter-strand orientation; inhibitor; disease; treatment; internucleotidyl bond cleavage; primer; ss.

Synthetic.

WO9526733-A1

12-OCT-1995

95WO-US003920. 31-MAR-1995; 94US-00223355. 31-MAR-1994;

(GENT-) GENTA INC.

Schwartz DA, Reynolds MA, Arnold LJ,

Daily WJ;

WPI; 1995-358439/46.

Oligo:nucleoside compounds for cleaving RNA - having a sequence that is complementary to a target nucleic acid strand and a non-complementary portion.

Disclosure; Page 93; 109pp; English.

This invention describes a novel oligonucleoside compound for hybridising to a target nucleic acid strand. The oligonucleoside comprises (a) an oligonucleoside sequence that is complementary to a target region or subregion of the target nucleic acid strand and (b) a portion that is non-complementary to a target site in the target region or subregion such that, when the oligonucleoside compound is hybridised to the target trand, or abase group at the site is oriented away from an inter-strand orientation. The oligonucleoside and combinations are used for inhibiting production of a selected protein in a cell by effecting cleavage at a site in a target region of cellular RNA that codes for the selected protein. They can be used for treating a condition in a mammal that is caused by the production of a selected protein. The oligonucleosides are target—mRNA-specific and can be used against manA specific to a target and can be used against manA specific to a can be used against manA specific to a particular disease state. They are relatively harmless to non-targeted nucleic acid. The non-complementary unit enhances internucleotidy! bond

Sequence 17 BP; 1 A; 6 C; 3 G; 7 T; 0 U; 0 Other;

```
0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stinchcomb DT, Chowrira B, Direnzo A, Draper KG, Dudycz LW;
Grimm S, Karpeisky A, Kisich K, Matulic-Adamic J, Mcswiggen JA;
Modak A, Pavco P, Beigleman L, Sullivan SM, Sweedler D, Thompson JD;
                                                                                                                                                                                                                                                            gene expression; downregulation; interleukin-5; IL-5; ICAM-1; intercellular adhesion molecule; rel A; tumour necrosis factor; intercellular adhesion molecule; rel A; tumour necrosis factor; INF-alpha; respiratory syncytial virus; RSV; bcr-abl; oncogene; translocation; chronic myelogenous leukaemia; CML; cancer; philadelphia chromosome; inflammation; autoimmune disease; atherosclerosis; myocardial infarction; stroke; restenosis; transplant rejection; heumatoid arthritis; psoriasis; myocardial ischaemia; Kawasaki disease; septic shock; HIV; human immunodeficiency virus; acquired immune deficiency syndrome; AIDS;
                          Gaps
                                                                                                                                                                                                                          Rat ICAM hammerhead ribozyme target sequence (nt. position 425).
                          ;
                                                                                                                                                                                                                                                   nucleic acid; ribozyme; trans cleavage; inhibition;
3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 7.9e+02;
tive 0; Mismatches 3; Indels
                            Mismatches
                            ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94US-00228041.
94US-00245736.
94US-00291332.
94US-00291433.
94US-00295620.
94US-00309000.
94US-00300000.
94US-00311486.
94US-00311486.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94US-00334847.
94US-00337608.
94US-00345516.
94US-00357577.
94US-00363233.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      94US-00201109.
94US-00218934.
94US-00222795.
94US-00224483.
94US-00227958.
                                                                                                                                         AAT53432 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94US-00319492.
                                                      851 AGCGTCCTGGCTCCAG 866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                95WO-IB000156
                                                                      2 AGCTTCCTTGCTCCTG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                     (first entry)
                            13; Conservative
                                                                                                                                                                                            (revised)
     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                         Rattus rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                 WO9523225-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   08-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                23-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         02-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             23-SEP-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-OCT-1994;
07-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LS-APR-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .6-AUG-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          28-SEP-1994
                                                                                                                                                                                           25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                          31-AUG-1995.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JUL-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11-OCT-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LO-NOV-1994
                                                                                                                                                                                                     27-MAR-1997
                                                                                                                                                                   AAT53432;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17-AUG-1
19-AUG-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         04-NOV-
                                                                                                                   RESULT 1166
                             Matches
                                                                                                                                                         à
```

Woolf T;

Usman N, Wincott FE,

Tracz D,

of human ICE were isolated

novel isoforms (AAW00993-96)

```
The present sequence represents a preferred target sequence for an enzymatic nucleic acid (i.e. a ribozyme) which cleaves ICAM-1 mRNA at the nucleotide base position indicated in the DE line. Regions of the mRNA had do not form secondary folding structures and that contain potential hammerhead and hairpin ribozyme cleavage sites were identified by computer analysis. Ribozymes directed against these mRNA sequences were designed and synthesised with modifications that improve their nuclease resistance. The ribozymes cleave the ICAM-1 target sequences and thereby inhibit ICAM-1 expression, making them useful for reducing transplant rejection and alleviating symptoms in patients with rheumatoid arrhritis, asthma and other inflammatory disorders. (Updated on 25-MAR-2003 to correct PI field.)
                                                                 Ribozymes having modified bases and methods for producing them - for use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Primer ICE-RT (AAT38208) is derived from the 3' untranslated sequence of human interleukin-1 beta converting enzyme (ICE). It was used to produce CDNA from poly-A+ RNA of the human T-cell line Unrkat and from total RNA of the human monocyte cell line THP-1. The CDNA was subsequently amplified (see also AAT38209-10) and cDNA clones (AAT38204-07) coding for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Iso:forms of interleukin 1 converting enzyme and related DNA - useful to identify iso:form inhibitors which can be used as anti-inflammatory and anti-apoptotic agents.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Interleukin-1 beta converting enzyme; ICE; isoform; inhibitor;
antlinflammatory; antlapoptotic; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.2; DB 1; Length 17; 56.2%; Pred. No. 7.9e+02; Live 4; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Interleukin-1 beta converting enzyme cDNA primer ICE-RT.
                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 1 A; 9 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fernandez-Alnemri T;
                                                                                     in inhibiting disease related genes.
                                                                                                                   Claim 2; Page 201; 407pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Example 1; Page 19; 50pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            897 CTCAGCTTCTGCGATC 912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (UYJE-) UNIV JEFFERSON THOMAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2 CUCGGCUUCUGCCACC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96WO-US002187.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95US-00391916.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAT38208 standard; cDNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 56.2
Matches 9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alnemri ES,
                                  WPI; 1995-351090/45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1996-425081/42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21-FEB-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-DEC-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  WO9625945-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   29-AUG-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Litwack G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAT38208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

0;

Gaps

.. 0

```
ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents the preferred target sequence for an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the human c-myb sequence at the base position indicated in the descriptor line. The c-myb sequence was screened for optimal ribozyme target sites using a computer folding algorithm, and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised and their by modification to prevent degradation by nucleases. The ribozymes cleave the c-myb sequence and can be used to prevent smooth muscle cell hyperproliferation in restenosis, especially after coronary angloplasty,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb,
                                                                     Gaps
                                                                                                                                                                                                                                                                                             Human c-myb hammerhead ribozyme target sequence (nt. position 1610).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                          Enzymatic nucleic acid, hammerhead, ribozyme, cleavage, human, smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb;
                                                                 ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·
0
                                   Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Match 3.9%; Score 11.2; DB 1; Length 17; Local Similarity 56.2%; Pred. No. 7.9e+02; Les 9; Conservative 4; Mismatches 3; Indels
                                                                Indels
Sequence 17 BP; 5 A; 6 C; 2 G; 4 T; 0 U; 0 Other;
                                3.9%; Score 11.2; DB 1;
81.2%; Pred. No. 7.9e+02;
live 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 4 A; 6 C; 3 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Jarvis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       for treating restenosis or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 1; Page 70; 128pp; English.
                                                                                           844 TGAAGACAGCGTCCTG 859
                                                                                                                                                                                                        ВЪ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95WO-US006368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94US-00245466.
95US-00373124.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               885 ATGCACTTACTTCTCA 900
                                                                                                                          TGAAGAGATCGTTCTG 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 Augcacungcagcuca 17
                                                                                                                                                                                                   AAT81257 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                 30-NOV-1997 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stinchcomb DT, Draper K,
                                                             13; Conservative
                                                                                                                                                                                                                                                                                                                                                            coronary angioplasty; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 1996-010927/01.
                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        and in cancers
                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                      WO9531541-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-MAY-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13-JAN-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-NOV-1995
                                                                                                                                                                                                                                  AAT81257;
                                                                                                                          16
                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                       1168
                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                   à
                                                                                                                      염
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ठे
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                                              Beigelman L,
Mcswiggen J,
Karpeisky A,
                         diagnosis; ss.
                                                                                      WO9618736-A2
                                                                                                                                                   22-NOV-1995;
                                                                                                                                                                                                                                                                                                   07-JUL-1995;
07-JUL-1995;
                                                                                                                                                                                                                                                  20-APR-1995
                                                                                                                                                                                                                                                                     02-MAY-1995;
                                                                                                                                                                                                                                                                                  04-MAY-1995
                                                                                                                      20-JUN-1996
                                                                                                                                                                                                                                   17-FEB-1995
                                                                                                                                                                                                                     23-DEC-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX63935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX63935,
        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        田城紀城
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present sequence represents the preferred target sequence for an enzymatic nucleic acid, especially a hammerhead ribozyme, which cleaves the human c-myb sequence at the base position indicated in the descriptor line. The c-myb sequence was screened for optimal ribozyme target sites to using a computer folding algorithm, and regions of the mRNA which did not form secondary folding structures and contained potential ribozyme cleavage sites were identified. Ribozymes were synthesised and their activities optimised by either varying the length of the binding arms or by modification to prevent degradation by nucleases. The ribozymes cleave the c-myb sequence and can be used to prevent smooth muscle cell hyperproliferation in restenosis, especially after coronary angioplasty,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New enzymatic nucleic acid molecules - cleave RNA produced by e.g. c-myb, for treating restenosis or cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                           hammerhead ribozyme target sequence (nt. position 1617).
                                                                                                                                                                  Enzymatic nucleic acid; hammerhead; ribozyme; cleavage; human; smooth muscle cell; hyperproliferation; restenosis; cancer; c-myb; coronary angioplasty; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 7.9e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rabbit stromelysin hammerhead target SEQ ID NO:541.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 6 A; 3 C; 3 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stinchcomb DT, Draper K, Mcswiggen J, Jarvis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 1; Page 70; 128pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    874 ACTITCCIGAGAIGCA 889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX63909 standard; RNA; 17 BP
                                             AAT81258 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                         94US-00245466.
95US-00373124.
                                                                                                                                                                                                                                                                                                                                          95WO-US006368.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                17 AATTTCTTGAGCTGCA 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                        (RIBO-) RIBOZYME PHARM INC
                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1996-010927/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      and in cancers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20-JUL-1999
                                                                                                                                                                                                                                                                                                                                            18-MAY-1995;
                                                                                                                                                                                                                                                                                                                                                                                          13-JAN-1995;
                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                             WO9531541-A2
                                                                                                                                                                                                                                                                                                                                                                            L8-MAY-1994;
                                                                                                              30-NOV-1997
                                                                                                                                                Human c-myb
                                                                                                                                                                                                                                                                                                            23-NOV-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAX63909;
                                                                               AAT81258;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1170
                RESULT 1169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX63909
                                 AAT81258
```

```
The present invention describes a novel enzymatic nucleic acid (ENA)

chaving a hammerhead motif (HM) comprising: (i) at least 5 ribose residues

chaving a lammerhead motification at position 4 of the ENA; (iii) at least

cental-O-methyl modifications; and (iv) a 3'-end modification. The ENA's

con inhibit collagenase and stromelysin production in the synovial

cental collagenase and stromelysin production in the synovial

cental posteoarthritis or rheumatoin arthritis. The ENA's can also

particularly osteoarthritis or rheumatoin arthritis. The ENA's can also

be used to treat antigen presenting cells of a donor to induce tolerance

con a alloantigen of a donor. They can also be used for

containing allergies and other inflammatory conditions. The ENA's can also

ce be used in diagnosis. Ribozyme therapy impacts on the expression of

stromelysin without introducing the non-specific effects upon gene

contential in without introducing the non-specific effects upon gene

contential that required of antisense molecules, and is highly

contential than that required of antisense molecules, and is highly

contential than that required of antisense molecules, and is highly

contential than that required of antisense molecules, and is highly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Jarvis I, Draper K, Pavco P;
sman N, Wincott F, Matulic-Adamic J;
odak A, Burgin A;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17; 50.0%; Pred. No. 7.9e+02; ative 5; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 17 BP; 5 A; 2 C; 4 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gustofson J, Usman N,
Thompson JD, Modak A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 154; 307pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX63935 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                               95US-00432874.
95US-00434509.
95US-0000951P.
95US-000974P.
95US-00512861.
                                                                                                                                                                                                                                                                        94US-00354920.
94US-00363253.
94US-00363254.
95US-00390850.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Stinchcomb DT,
                                                                                                                                                                                                          95WO-US015516.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95US-00541365
                                                                                                                                                                                                                                                                                                                                                                                                                  95US-00426124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             837 TCTTCTCTGAAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : ::|: : ||||||||
1 UGUUCUUUAAAGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               auto-immune diseases.
Oryctolagus cuniculus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 1996-300653/30.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 8; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present invention
```

0

à q RESULT 1172

```
Arthritic condition, graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation;
                                                                                                                                                                                                                                                                                                                                                                                               Enzymatic nucleic acid molecules having a hammer-head motif - used for
the treatment of arthritis, induction of graft tolerance or treatment of
                                                                                                                                                                                                                                                                                                                                     Stinchcomb DT, Jarvis T, Draper K, Pavco P;
Gustofson J, Usman N, Wincott F, Matulic-Adamic J;
Thompson JD, Modak A, Burgin A;
                    Rabbit stromelysin hammerhead target SEQ ID NO:567.
                                                                                                                                                                                                                                                                                                                                                                                                                                       Example 1; Page 154; 307pp; English.
                                                                                                                                                                                                94US-00363253.
94US-00363254.
95US-00390850.
                                                                                                                                                                                                                               95US-00426124.
95US-00432874.
95US-00434509.
95US-0000951P.
                                                                                                                                                                   95WO-US015516
                                                                                                                                                                                                                                                                         95US-0000974P.
                                                                                                                                                                                                                                                                                             95US-00541365
                                                                                                                                                                                                                                                                                                                                   Stinchcomb DT,
                                                                                                                                                                                                                                                                                 95US-00512861
                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC.
 20-JUL-1999 (first entry)
                                                                                                       Oryctolagus cuniculus.
                                                                                                                                                                                                                                                                                                                                                                                                                     auto-immune diseases.
                                                                                                                                                                                                                                                                                                                                                                            WPI; 1996-300653/30.
                                                                                  diagnosis; ss.
                                                                                                                         WO9618736-A2.
                                                                                                                                                                                                                            20-APR-1995;
02-MAY-1995;
04-MAY-1995;
07-JUL-1995;
07-JUL-1995;
07-AUG-1995;
                                                                                                                                                                                                                                                                                                                                    Beigelman L,
Mcswiggen J,
                                                                                                                                                                  22-NOV-1995;
                                                                                                                                                                                                                                                                                                                                                        Karpeisky A,
                                                                                                                                              20-JUN-1996
                                                                                                                                                                                       13-DEC-1994
                                                                                                                                                                                                          23-DEC-1994
17-FEB-1995
                                                                                                                                                                                                                                                                                          05-OCT-1995
```

94US-00354920

The present invention describes a novel enzymatic nucleic acid (ENA)

having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues

(ii) a 2'-C-ally1 modification at position 4 of the ENA; (iii) at least

ten 2'-O-methy1 modifications; and (iv) a 3'-end modification. The ENA's

can inhibit collagenase and stromelysin production in the synovial

membrane of joints for the treatment or prevention of arthritis,

particularly osteoarthritis or rhemmatoid arthritis. The ENA's can also

be used to treat antigen presenting cells of a donor to induce tolerance

in a recipient to an alloantigen of a donor. They can also be used for

chancing graft tolerance or for treating autoimmune disease, and for

treating allergies and other inflammatory conditions. The ENA's can also

be used in disquosis: Ribozyme therapy impacts on the expression of

stromelysin without introducing the non-specific effects upon gene

expression which accompany treatment with retinoids and dexamethasone.

The concentration of ribozyme required to affect a therapeutic treatment present invention

is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the

```
Gaps
                                                                        0;
                                3.9%; Score 11.2; DB 1; Length 17; 31.2%; Pred. No. 7.9e+02; Ive 0; Mismatches 3; Indels
Sequence 17 BP; 2 A; 5 C; 4 G; 0 T; 6 U; 0 Other;
                                                  81.2%;
                                                                    Conservative
                                               Local Similarity
tes 13; Conserv
                                  Query Match
                                                            Matches
```

CCACTTCTGAGGGCAG 784

769 17

N

CCACTGCTGAAGGAAG

q à

.; 0

Arthritic condition; graft tolerance; immune response; target; cleavage; hammerhead ribozyme; hairpin ribozyme; human; rabbit; mouse; collagenase; stromelysin; synovial membrane; joint; arthritis; osteoarthritis; rheumatoid arthritis; autoimmune disease; allergy; inflammation; matic nucleic acid molecules having a hammer-head motif - used for treatment of arthritis, induction of graft tolerance or treatment of , Pavco P; Matulic-Adamic J; Rabbit stromelysin hammerhead target SEQ ID NO:540. × Jarvis T, Draper K sman N, Wincott F, odak A, Burgin A; Usman N, Modak A, 94US-00354920. 94US-00363253. 94US-00363254. 95US-00363260. 95US-00426124. 95US-00432874. 95US-0000951P. AAX63908 standard; RNA; 17 BP 95WO-US015516 95US-00512861. Stinchcomb DT, Gustofson J, Thompson JD, (RIBO-) RIBOZYME PHARM INC. entry) Oryctolagus cuniculus. (first auto-immune diseases WPI; 1996-300653/30. diagnosis; ss 17-FEB-1995; 20-APR-1995; 02-MAY-1995; 04-MAY-1995; Beigelman L, Mcswiggen J, Karpeisky A, 20-JUL-1999 WO9618736-A2 22-NOV-1995; 23-DEC-1994; 23-DEC-1994; 20-JUN-1996. 07-JUL-1995 07-AUG-1995 AAX63908; Enzymatic AAX63908 

The present invention describes a novel enzymatic nucleic acid (ENA) having a hammerhead motif (HM) comprising: (i) at least 5 ribose residues ; (ii) a 2.'-callyl modification at position 4 of the ENA; (iii) at least ten 2'-c-methyl modifications; and (iv) a 3'-end modification. The ENA; can inhibit collagenase and stromelysin production in the symovial membrane of joints for the treatment or prevention of arthritis; particularly osteoarthritis or rheumatorid arthritis. The ENA's can also be used to treat antigen presenting cells of adonor to induce tolerance enhancing graft tolerance or for treating autoimmune disease, and for treating allergies and other inflammatory conditions. The ENA's can also be used in diagnosis. Ribozyme therapy impacts on the expression of the communication of a donor to induce to the complex of the expression of stromelysin without introducing the non-specific effects upon gene expression which accompany treatment with retinoids and dexamethasone. The concentration of ribozyme required to affect a therapeutic treatment is lower than that required of antisense molecules, and is highly specific. The present sequence is used in the exemplification of the Example 1; Page 154; 307pp; English. present invention

Sequence 17 BP; 5 A; 3 C; 3 G; 0 T; 6 U; 0 Other;

Query Match

DB 1; Length 17; 3.9%; Score 11.2;

AAT12442,

ð pp

```
Vascular endothelial growth factor receptor; VBGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (fil-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (fik-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rhematoid arthritis) can be treated by administering the nucleic acid molecule or the expression vector to the patient. AAX67275 to AAX75752 represent specific examples of nucleic acid molecules from the present invention
                                                                                      Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; thermour angiogenessis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human flt1 VEGF receptor hammerhead ribozyme substrate #1157.
                                                     Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #130.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17; 56.2%; Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 1 A; 5 C; 5 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 4; Page 159; 218pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     867
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 GGGUCCUCGUUCCAGU 17
                                                                                                                                                                                                                                                                                                                                                          95US-0005974P.
                                                                                                                                                                                                                                                                                                                                                                         96US-00584040.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAX69862 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                               (RIBO-) RIBOZYME PHARM INC. (CHIR ) CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     852 GCGTCCTGGCTCCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28-JUL-1999 (first entry)
                          28-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1997-259017/23.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                 WO9715662-A2.
                                                                                                                                                                                                                                                                                                                     25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                            26-OCT-1995;
                                                                                                                                                                                                                                                                                                                                                                             11-JAN-1996;
                                                                                                                                                                                                                                                                                   01-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAX69862;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1175
                                                                                                                                                                                                                Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAX69862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                              ;
0
                                                                                                                                                                                                                                                                                                                                            Antiviral; phosphorothioate; mRNA 4; mRNA 5; herpes simplex virus 1; HSV; viral infection; HIV; varicella zoster virus; VZV; therapy; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAT12435-T12454 represent phosphorothioate oligonucleotides with antiviral activity. These sequences, and the phosphorothioate oligonucleotides represented by AAT12418-T12434 (which are complementary to regions of the mRNA 4 or 5 of herpos simplex virus 1 (HSV)), are effective in the prevention and treatment of viral infection. The sequences are especially effective against infection by HSV, HIV or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Antiviral phosphoro:thioate oligo:nucleotide(s) - active against e.g. herpes simplex virus 1, HIV and varicella zoster virus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ·
0
                                ·
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.9%; Score 11.2; DB 1; Length 17; 11.2%; Pred. No. 7.9e+02; ve 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  a
"phosphorothioate oligonucleotides"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tamura N;
Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 3 A; 0 C; 12 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Iwatani W,
                                                                                                                                                                                                                                                                                                              Antiviral phosphorothioate oligonucleotide #25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mizushima Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 6; Page 150; 163pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX74602 standard; RNA; 17 BP.
                                    ٠,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    920 CATCACCACCCTC 935
                                                                                                                                                                                                      AAT12442 standard; DNA; 17 BP
                                                                        837 TCTTCTCTGAAGACAG 852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95WO-JP001472.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               94JP-00173862
94JP-00268603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       varicella zoster virus (VZV)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81.2%;
                                                                                           GUUCUUUAAAGACAG 17
                 50.08;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (LTTL-) LTT INST CO LTD.
(KAKE ) KAKEN PHARM CO LTD.
                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                13; Conservative
                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ...17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shoji Y, Shimada J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1996-117045/12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                   Best Local Similarity
Matches 8; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                Key
modified_base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26-JUL-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-JUL-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                01-NOV-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO9603500-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        08-FEB-1996.
                                                                                                                                                                                                                                                                               17-SEP-1996
                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
                                                                                                                                                                                                                                           AAT12442;
                                                                                                             (1)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1174
```

0

Gaps

. 0

AAX74602;

AAX74602

Matches

à 음

```
5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25-MAR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WO9708339-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               28-AUG-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25-AUG-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          08-JAN-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-MAR-1997
                                          Pavco P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Brown J,
                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT91757;
      (RIBO-)
(CHIR )
                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1177
                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT91757
       à
                                                                                                                                                                                                                                                                                                                                                                                  셤
                                                                                                                                                                                                                                                                              The present invention describes nucleic acid molecules which modulate the synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VEGF). A patient (preferably human) having a condition associated with the level of the fms-like tyrosine kinase 1 (fl-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour angiogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ö
                                                                                                                                                                                                            Nucleic acid molecule modulating VEGF receptor(s) gene expression or mRNA stability - useful for treating e.g. tumour angiogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Vascular endothelial growth factor receptor; VEGF receptor; flt-1; flk-1; KDR; hammerhead ribozyme; hairpin ribozyme; cleavage; tumour angiogenesis; psoriasis; rheumatoid arthritis; ocular disease; fms-like tyrosine kinase 1; kinase insert domain containing receptor; foetal liver kinase 1; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mouse flt-1 VEGF receptor hammerhead ribozyme substrate #631.
                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; Live 0; Mismatches 3; Indels
                                                                                                                                                                   Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 4 A; 3 C; 5 G; 0 T; 5 U; 0 Other;
                                                                                                                                                                 Stinchcomb D,
                                                                                                                                                                                                                                                            Claim 4; Page 81; 218pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        862 TCCAGTTGGAACACTT 877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ВЪ
                                                                      96WO-US017480
                                                                                                       96US-00584040
                                                                                            95US-0005974P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    95US-0005974P.
96US-00584040.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96WO-US017480
                                                                                                                            (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAX75103 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 rccadarddaaccarr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13; Conservative
                                                                                                                                                                Pavco P, Mcswiggen J,
                                                                                                                                                                                     WPI; 1997-259017/23
                                                                                                                                        (CHIR ) CHIRON CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity
Matches 13; Conserv
 Homo sapiens
                                                                                          26-OCT-1995;
11-JAN-1996;
                       WO9715662-A2
                                                                     25-OCT-1996;
                                             01-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                W09715662-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-OCT-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26-OCT-1995;
11-JAN-1996;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        01-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAX75103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sb.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX75103
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            d
```

```
synthesis, expression and/or stability of a mRNA encoding 1 or more receptors of vascular endothelial growth factor (VBGF). A patient (preferably human) having a condition associated with the level of the fifth-like tyrosine kinase 1 (flt-1), kinase insert domain containing receptor (KDR) and/or foetal liver kinase 1 (flk-1) (e.g. tumour anglogenesis, ocular diseases, psoriasis and rheumatoid arthritis) can be treated by administering the nucleic acid molecule or the expression of nucleic acid molecules from the present specific examples of nucleic acid molecules from the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                        mRNA
                                                                                                                                                                                                                                           The present invention describes nucleic acid molecules which modulate the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR; primer; amplify; polymerase chain reaction; haematopoietic cell; chronic myelogenous leukaemia; human; bcr2-abl2; translocation region; cytogenetic remission; Ph chromosome; bcr3-abl2; CML cell; acute lymphotrophic leukaemia; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Detection of chronic myelogenous leukaemia cells - by amplification of
                                                                                                                                        gene expression or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                            Nucleic acid molecule modulating VEGF receptor(s) gene expression or stability – useful for treating e.g. tumour anglogenesis, psoriasis, rheumatoid arthritis, etc., in a human patient.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Primer CAP10 for bcr2-abl2 and bcr3-abl2 translocation regions.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17; 31.2%; Pred. No. 7.9e+02; tive 8; Mismatches 3; Indels
                                                           Escobedo J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 1 A; 5 C; 2 G; 0 T; 9 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /*tag= a
/note= "biotin labelled"
                                                         Stinchcomb D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Location/Qualifiers
                                                                                                                                                                                                       Claim 4; Page 174; 218pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 GCUCUGUCUCUCUUAU 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95WO-US010919.
RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAT91757 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       824 GCTGTGTCTCTTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (revised)
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                       Mcswiggen J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lockhartbruce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /*tag=
                 CHIRON CORP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (DADE-) DADE INT INC.
                                                                                          WPI; 1997-259017/23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WPI; 1997-179294/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Key
modified_base
```

24-FEB-1999 AAV95350/ ò g

16 CICCICAGACICCGGG

à g RESULT 1179 AAV46911

the invention. AAP191759 can also be used as capture oligomucleotides (ON), while AAP19759 can also be used as capture oligomucleotides (ON), while AAP19760-T93763, AAP191791 and AAP19792 can also be used as detector agents. The method of the invention is for also be used as detector agents. The method of the invention is for detecting or monitoring chronic myelogenous leukaemia (CML) cells in a human patient. The method comprises obtaining RNA from haematopoietic channer be bordered amplifying it using a pair of primers that amplify both the borderable and borderable translocation regions. The amplify both the borderable and borderable translocation regions. The capture is contracted with a capture mixture. The capture ON is Specific for the bridging ligand to form a capture mixture. The capture on it capture applied to a receptor specific of the binding ligand. The solid phase coupled to a receptor specific of the binding ligand. The solid phase is washed, then contacted with a chector agent comprising a detector on specific for the borderable or correlated of the presence of cheector agent comprising a detector on specific for the borderable of the patient. The method is to detect or capture the solid phase is then correlated with the presence of questive and the borderable and the and AAT91765-T91792 are primers used in the method of from haematopoietic cells with primers for the bcr2-abl2 and bcr3-Claim 6; Page 12; 79pp; English abl2 trans-location regions.

Sequence 17 BP; 3 A; 6 C; 5 G; 3 T; 0 U; 0 Other;

Gaps 0; 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Indels Conservative Sest Local Similarity 13; Query Match Matches

.. 0

CIGAGGGCAGCCCTC 790 N CTGAGTGAAGCCGCTC 775 17

RESULT 1178

BP AAV95350 standard; RNA; 17 AAV95350;

(first entry)

Human, c-fos, hammerhead ribozyme, hairpin ribozyme, target site, cancer, oncogene, leukaemia, neuroblastoma, diagnosis, genetic drift, mutation, Human c-fos target sequence nucleotide position 859.

Homo sapiens

diseased cell; ss.

WO9832846-A2

30-JUL-1998.

98WO-US001017. 20-JAN-1998; 97US-0037658P. 23-JAN-1997; 24-DEC-1997;

(RIBO-) RIBOZYME PHARM INC.

Stinchcomb DT; Mcswiggen JA, Jarvis T,

WPI; 1998-427942/36

Enzymatic nucleic acid molecules which specifically cleave RNA derived

; The present invention describes an enzymatic nucleic acid molecule which specifically cleaves RNA derived from a c-fos gene. AAV95401 to AAV95540 and AAV95541 to AAV95544 tepresent hammerhead tibozymes and hairpin ribozymes, respectively, which specifically cleave human c-fos. AAV95261 to AAV95400 and AAV95585 to AAV95628 represent human c-fos target cancer associated with concleic acid molecules can be used for treating cancer associated with elevated levels of c-fos oncogene, especially leukaemias, neuroblastomas and lung, breast and colon cancers. The tibozymes may also be used as diagnostic tools to examine genetic drift and mutations within diseased cells, or to detect the presence of c-fos RNA in a cell from a c-fos gene - useful for treating conditions related to levels of -fos, especially cancer. Gaps ö 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; ive 0; Mismatches 3; Indels Sequence 17 BP; 3 A; 4 C; 8 G; 0 T; 2 U; 0 Other; English 820 805 CICCICCAACICAGGG Query Match 3.9 Best Local Similarity 81.2 Matches 13; Conservative 72pp; Claim 2; Page 51;

Secondary structure; mRNA; phosphorothicate backbone; G-protein, bronchoconstriction; lung inflammation; asthma; pulmonary disease; allergy; emphysema; cystic fibrosis; ss. *tag= a note= "contains phosphorothioate internucleotide" Antisense oligonucleotide 411, targeting adenosine Al receptor. Location/Qualifiers AAV46911 standard; DNA; 17 BP (first entry) modified base Homo sapiens 10-NOV-1998 Synthetic AAV46911; 

97WO-US022017. linkages" WO9823294-A1 04-JUN-1998.

96US-00757024. (UYEC-) UNIV EAST CAROLINA. 26-NOV-1996; Nyce JW;

26-NOV-1997;

WPI; 1998-322464/28.

Treating respiratory disease with antisense sequences directed against adenosine or bradykinin receptors - with localised delivery to the respiratory system, suitable for long term treatment of asthma, adult respiratory distress syndrome etc.

Claim 12; Page 8-24; 47pp; English.

Sequences AAV46501-V47446 are anti-sense oligonucleotides that target the

human adenosine Al receptor, the design of which required the secondary structure of this targets mRNA. The adenosine receptor mRNA secondary structure was both analysed and used to construct antisense oligonucleotides containing a phosphorothioate backbone. Once the antisense molecules are created they can be used to target their predetermined target, thus causing the gene product to decrease. The antisense oligonucleotides were targeted to specific mRNA regions containing either a junction between the intron and exon, or where they protein coupled family of cell surface receptor is a member of the Gransmembrane segments. These oligonucleotides can be used to treat or prevent conditions associated with bronchoconstriction and/or lung inflammation in humans or other animals e.g. asthma, pulmonary disease, allergy, emphysema and cystic fibrosis

Sequence 17 BP; 6 A; 1 C; 8 G; 2 T; 0 U; 0 Other;

3.9%; Score 11.2; DB 1; Length 17; 31.2%; Pred. No. 7.9e+02; 3; Indels Pred. No. 7.9e 0; Mismatches CCTCCAACTCAGGGTT 822 81.2%; 17 cercéarcréacerre 2 13; Conservative Query Match Best Local Similarity 807 Jatches ð d

AAV46943 standard; DNA; 17 RESULT 1180 AAV46943/c 

BP.

(first entry) 10-NOV-1998 AAV46943;

Antisense oligonucleotide 443, targeting adenosine Al receptor.

Secondary structure; mRNA; phosphorothioate backbone; G-protein; bronchoconstriction; lung inflammation; asthma; pulmonary disease; allergy; emphysema; cystic fibrosis; ss.

Homo sapiens. Synthetic

/*tag= a /note= "contains phosphorothioate internucleotide linkages" Location/Qualifiers modified_base

WO9823294-A1

04-JUN-1998

97WO-US022017. 26-NOV-1997;

(UYEC-) UNIV EAST CAROLINA

96US-00757024

26-NOV-1996;

Nyce JW;

WPI; 1998-322464/28.

Treating respiratory disease with antisense sequences directed against adenosine or bradykinin receptors - with localised delivery to the respiratory system, suitable for long term treatment of asthma, adult respiratory distress syndrome etc.

Claim 12; Page 8-24; 47pp; English.

Sequences AAV46501-V47446 are anti-sense oligonuclectides that target the human adenosine Al receptor, the design of which required the secondary structure of this targets mRNA. The adenosine receptor mRNA secondary

ö structure was both analysed and used to construct antisense oligonucleotides containing a phosphorothicate backbone. Once the antisense molecules are created they can be used to target their predetermined target, thus causing the gene product to decrease. The antisense oligonucleotides were targeted to specific mRNA regions containing either a junction between the intron and exon, or where they may overlap the initiation codon. The receptor is a member of the G-protein coupled family of cell surface receptors that have 7-transmembrane segments. These oligonucleotides can be used to treat or prevent conditions associated with bronchoconstriction and/or lung inflammation in humans or other animals e.g. asthma, pulmonary disease, allergy, emphysema and cystic fibrosis Gaps ; Length 17; 3; Indels Sequence 17 BP; 6 A; 1 C; 8 G; 2 T; 0 U; 0 Other; 3.9%; Score 11.2; DB 1; 11.2%; Pred. No. 7.9e+02; 81.2%; Prea. .v.. 807 CCTCCAACTCAGGGTT 822 13; Conservative Best Local Similarity Query Match Matches 88888888888888888 à

16 cércéaréréagerir 1

d

.

Gaps

.; 0

RESULT 1181 AAV97491

BP AAV97491 standard; RNA; 17

AAV97491;

17-MAR-1999 (first entry) 

Human EGF-R target sequence nucleotide position 2376.

Human, epidermal growth factor receptor; EGFR; EGF-R; target sequence; hammerhead ribozyme; hairpin ribozyme; inhibition; cell proliferation; cancer; genetic drift; detection; mutation; ss.

Homo sapiens.

WO9833893-A2

06-AUG-1998.

98WO-US000730. 14-JAN-1998; 97US-0036476P. 97US-00985162. 31-JAN-1997; 04-DEC-1997;

(RIBO-) RIBOZYME PHARM INC. (UYAS-) UNIV ASTON.

UNIV ASTON

Mcswiggen JA; Akhtar S, Fell P,

WPI; 1998-437449/37

Enzymatic nucleic acids - which cleave RNA derived from an epidermal growth factor receptor, useful for inhibiting cell proliferation and for treating cancers.

Claim 5; Page 73; 109pp; English.

which specifically cleave RNA derived from an epidermal growth factor receptor (BGF-R) gene. AAV97221 to AAV98043 and AAV98979 to AAV99090 to represent specifically claimed target sequence from human BGF-R. AAV98044 to AAV98866 and AAV98867 to V9878 represent hammerhead ribozymes and hairpin ribozymes respectively for human BGF-R. The NAMs are useful for cleaving BGF-R RNA in the treatment of a condition associated with BGFR expression levels e.g. to inhibit cell proliferation in the prevention or treatment of cancers. The NAMs can also be used as diagnostic tools to examine genetic drift and mutations within diseased cells or to detect the presence of EGF-R RNA in a cell The present invention describes enzymatic nucleic acid molecules (NAMS)

à g

```
·,
                                       Gaps
                                                                                                                                                                                                           Solanidine; glucosyltransferase; potato; citrate synthase; target; hammerhead ribozyme; hairpin ribozyme; alkaloid biosynthesis; flower formation; cleavage; solanaceous plant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                               New enzymatic nucleic acid(s) - useful for, e.g. reducing alkaloid biosynthesis or regulating flowering.
                                       .
0
                Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 7.9e+02; Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                         Potato citrate synthase target sequence position 714.
Sequence 17 BP; 4 A; 5 C; 5 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 53; Page 54; 79pp; English.
                                                                                                                                                                                                                                                                                                                                   97US-0036545P.
97US-0036599P.
97US-00979416.
                                                                                                                                AAV96514 standard; RNA; 17 BP.
                                                           747 GGGTCCCAGGGTCCCT 762
                                                                                                                                                                                                                                                                                                                98WO-US000738.
                                                                             17 GGGATCCAGAGTCCCT 2
                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                        01-MAR-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                               Zwick MG, Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                  WPI; 1998-427939/36.
                                                                                                                                                                                                                                                      Solanum tuberosum.
                                                                                                                                                                                                                                                                         WO9832843-A2.
                                                                                                                                                                                                                                                                                                                                    28-JAN-1997;
28-JAN-1997;
                                                                                                                                                                                                                                                                                                                14-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                        24-NOV-1997;
                                                                                                                                                                                                                                                                                             30-JUL-1998
                                                                                                                                                     AAV96514;
                                                                                                               RESULT 1182
                                                                                                                         AAV96514/
```

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity (e.g. ribozymes) which are capable of modulating the expression of plant genes: (i) involved in biosynthesis of alkaloids; or (ii) involved in flower formation. AAV95982 to AAV96334, and AAV96335 to AAV9634 represent potato solanidine glucosyltransferase hammerhead and carrier ribozymes, respectively. AAV95629 to AAV95931, and AAV96335 to AAV96734 represent potato solanidine glucosyltransferase target sequences. AAV96773 to AAV97170, and AAV97171 to AAV97195 represent potato colrate synthase hammerhead and hairpin ribozymes, respectively. AAV96735 to AAV96772, and AAV97196 to AAV9720 represent potato citrate synthase target sequences. Ribozymes of the present invention can be used to inhibit the synthesis of towarc alkaloids in solanaceous plants, particularly potato but also tomato, pepper, aubergine and ditura or connibit the synthesis of towarc particularly cotato but also tomato, pepper, aubergine and ditura or connibit the synthesis of connect, turnip, sweet potato and turf grass. Also the ribozymes can be used for RNA manipulation in the same carrier restriction endomucleases are for DNA, as well as to examine way that restriction endonucleases are for DNA, as well as to examine genetic drift and mutations in plants and to detect specific RNA. The ribozymes can be targeted to specific genes or to consensus sequences within a family of related genes, and being catalytic need to be present very low concentrations only

Sequence 17 BP; 5 A; 3 C; 3 G; 0 T; 6 U; 0 Other;

```
The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity (e.g. ribozymes) which are capable of modulating the expression of plant genes: (i) involved in biosynthesis of a HARAloids or (ii) involved in flower formation. AAV95982 to AAV96334, and AAV96335 to AAV96344 represent potato solanidine glucosyltransferase hammerhead and hairpin ribozymes, respectively. AAV95629 to AAV95931, and AAV96355 to AAV96734 represent potato solanidine glucosyltransferase target contracts synthase hammerhead and hairpin ribozymes, respectively. CC potato citrate synthase hammerhead and hairpin ribozymes, respectively. AAV96735 to AAV96772, and AAV97170, and AAV97171 to AAV97195 represent potato citrate synthase target sequences. Ribozymes of the present invention can be used cynthase target sequences. Ribozymes of the present invention can be used to inhibit thowering in potato. Detect spinach, cabbage, brussel sprouts, controlarly potato but also tomato, pepper, aubergine and ditura or to inhibit thowering in potato. Lettuce, spinach, cabbage, brussel sprouts, crugular kale, collards, cerv, letture, spinach, cabbage, brussel sprouts, crugular kale, collards, beet, turnip, sweet potato and turf crugals. Also the ribozymes are for DNA, as well as to examine way that restriction endonucleases are for DNA, as well as to examine cribozymes can be targeted to specific genes or to consensus sequences within a family of related genes, and being catalytic need to be present crucy at only very low concentrations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New enzymatic nucleic acid(s) - useful for, e.g. reducing alkaloid biosynthesis or regulating flowering.
                                                                                                                                                                                                                                                                                                                                                                                  Solanidine; glucosyltransferase; potato; citrate synthase; target; hammerhead ribozyme; hairpin ribozyme; alkaloid biosynthesis; flower formation; cleavage; solanaceous plant; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .;
0
                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.9%; Score 11.2; DB 1; Length 17; 43.8%; Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                Solanidine glucosyltransferase target sequence position 400.
3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 7.9e+02;
iive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 3 A; 3 C; 2 G; 0 T; 9 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Claim 13; Page 46; 79pp; English.
                                                                                                                                                                                                                               AAV95735 standard; RNA; 17 BP.
                                                                                     CTICIGGAICAGATI 917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          97US-00979416.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-0036545P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98WO-US000738
                                                                                                                           Crrgagcaarcagarr 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                             (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7; Conservative
        Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             WPI; 1998-427939/36.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Solanum tuberosum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO9832843-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           L4-JAN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28-JAN-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          24-NOV-1997;
                                                                                                                                                                                                                                                                                                             01-MAR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       30-JUL-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zwick MG,
                                                                                                                                                                                                                                                                       AAV95735;
                                                                                       902
                                                                                                                             16
                                                                                                                                                                                          RESULT 1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                 AAV95735
                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                             d
```

```
Pavco PA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA17430;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA17430
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            원
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ó
                                                                                                                                                                                                                                                                                                                                                                                                            The present sequence invention describes ribozymes targeted to modulate the synthesis and/or expression of interleukin (II)-2R gamma encoded RNA. AAV93889 to AAV94574 represent specifically claimed ribozymes, and AAV94575 to AAV95260 represent specifically claimed substrate sequences from the present invention. The ribozymes can be used for the treatment of, e.g. graft rejection, autoimmune disease, cancer, psoriasis, allergy and other inflammatory conditions. The ribozymes are also used to induce
                                                                                                                                                                                                                                                                                                                                                             Ribozymes targetted to interleukin 2 - useful for treating e.g. cancer, autoimmune disease and allergies.
                                                                                                                                                 Human, IL-2 receptor g-chain; interleukin 2 receptor gamma chain;
hammerhead ribozyme; hairpin ribozyme; substrate; expression; cancer;
autoimmune disease; psoriasis; allergy; inflammatory disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Integrin alpha 6 subunit substrate sequence SEQ ID NO:4261.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               tolerance in a recipient to alloantigen from a donor
                                                                                                                               Canine IL-2 receptor g-chain substrate position 81.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 17 BP; 2 A; 9 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 11.2; DB 1;
Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                           Claim 4; Page 45; 61pp; English.
                                                                       AAV95080 standard; RNA; 17 BP.
      877 TTCCTGAGATGCACTT 892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          767
                  :: |:|| |:| ||::
1 UUUCUGAUAUGUACUU 16
                                                                                                                                                                                                                                                                 97WO-US021748
                                                                                                                                                                                                                                                                                     96US-00758306
                                                                                                                                                                                                                                                                                                                           Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCACGGUCCCCAUGCC 17
                                                                                                                                                                                                                                                                                                      (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAA21035 standard; RNA; 17
                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19-JUN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         752 CCAGGGTCCCTAGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       12; Conservative
                                                                                                                                                                                                                                                                                                                                             WPI; 1998-333332/29.
                                                                                                                                                                              graft rejection; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                         Stinchcomb DT,
                                                                                                                                                                                                                                                                  02-DEC-1997;
                                                                                                                                                                                                                                                                                   03-DEC-1996;
                                                                                                                                                                                                                           WO9824913-A2
                                                                                                            24-FEB-1999
                                                                                                                                                                                                                                               11-JUN-1998.
                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                           Canis sp.
                                                                                         AAV95080;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAA21035;
                                                    RESULT 1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                             AAA21035
ID AAAX
XX AAC AAAX
XX DT 19-0
XX DE INTE
      ò
                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl content an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16755 to AAA191561 to AAA17621 to AAA17621 to AAA19155 and AAA11685 and AAA19187 to AAA19154 represent ribozyme sequences for Tie-2, and AAA19185 to AAA19187 to AAA19221 represent their corresponding target sequences; AAA19223 to AAA21681 represent their corresponding target sequences; AAA19223 to AAA21681 represent their corresponding target sequences; AAA21689 to AAA21681 represent their corresponding target sequences; AAA21689 to AAA21683 represent their corresponding target sequences; AAA21689 to AAA21683 represent their corresponding target sequences; Corresponding targe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ·;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Novel ribozymes for modulating the synthesis, expression and/or stability
Human; aryl hydrocarbon nuclear transport, ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiniflammatory; antiathritic; antipsoriatic; ARMD; dermatological; RNA cleavage, cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovagoular glaucoma;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 myopic degeneration; psoriasis; verruca vulgaris; angiofibroma;
tuberous sclerosis; pot-wine stain; Sturge Weber syndrome;
Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mcswiggen JA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.9%; Score 11.2; DB 1; Length 17; 43.8%; Pred. No. 7.9e+02; ive 6; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 0 A; 3 C; 5 G; 0 T; 9 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Coeshott C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of an mRNA encoding an angiogenic factors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 55; Page 183; 305pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Jarvis T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA17430 standard; RNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99WO-US006507,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0079678P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       : | | | | | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | : : | 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            815 TCAGGGTTGGCTGTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      7; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Roberts E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1999-591315/50.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 7; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24-MAR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     27-MAR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9950403-A2
```

19-JUN-2000 (first entry)

Aryl hydrocarbon nuclear transport substrate sequence SEQ ID NO:656.

Human, aryl hydrocarbon nuclear transport, ARNT, TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; harmmerhaad ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antimilammatory; antiarthritic; antidiabetic; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; potoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; poto-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

Homo sapiens.

WO9950403-A2

07-0CT-1999.

99WO-US006507. 24-MAR-1999;

98US-0079678P. 27-MAR-1998;

(RIBO-) RIBOZYME PHARM INC.

Mcswiggen JA; Coeshott C, Jarvis T, Pavco PA, Roberts E,

WPI; 1999-591315/50.

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

Claim 53; Page 79; 305pp; English.

Novel ribozymes for modulating the synthesis, expression and/or stability

of an mRNA encoding an angiogenic factors. Claim 54; Page 224; 305pp; English.

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARNT) gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA1675 to AAA1762 represent ribozyme sequences for AAA1767 to AAA1762 to AAA1762 to AAA1763 to AAA1763 to AAA1763 to AAA1763 to AAA1763 to AAA1763 to AAA1968 to AAA1968 to AAA1968 sequences; AAA19154 represent ribozyme sequences for Tie-2, and AAA19155 to AAA1908 and AAA1915 to AAA1915 and AAA21801 to AAA2189 to AAA2180 and AAA2180 to AAA2180 and AAA2180 to AAA2180 and AAA2180 to AAA2180 to AAA2180 to AAA2180 to AAA2180 to AAA2180 and AAA2180 to AAA2180 to AAA2180 and AAA2180 to AAA2180 to AAA2180 and AAA2280 to AAA2180 to AAA2180 to AAA2180 to AAA2180 and AAA2280 to AAA2180 to AAA2180 to AAA2180 to AAA2180 to AAA2280 to AAA2280 and AAA2280 to AAA2280 and AAA2280 to AAA2280 to AAA2280 to AAA2280 to AAA2280 and AAA2280 to AAA2280 to AAA2280 and AAA2280 to AAA2280 and AAA2280 to AAA2280 and AAA2280 to AAA2280 and AAA2280 to AAA2280 to AAA2280 and AAA2280 to AAA280 to AAA2280 to AAA2280 to AAA2280 to AAA2280 to AAA2280 to AAA280 to AAA2280 to AAA280 to AAA280 to AAA280 to AAA280 to AAA280 to AAA280 to A stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related macular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3

Sequence 17 BP; 7 A; 2 C; 4 G; 0 T; 4 U; 0 Other;

Gaps ., 0 3.9%; Score 11.2; DB 1; Length 17; 62.5%; Pred. No. 7.9e+02; tive 3; Mismatches 3; Indels 3; Conservative Best Local Similarity 10; Query Match Matches

936 CAGAGAATTTTACGCA 951

ò

1 CAGAGAAUUUCAGGAA 16

.. 0

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic, antinilammandery; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss. Coeshott C, Mcswiggen JA; Integrin subunit beta 3 substrate sequence SEQ ID NO:5728. Jarvis T, AAA22502 standard; RNA; 17 BP. 99WO-US006507. 98US-0079678P. (RIBO-) RIBOZYME PHARM INC. (first entry) Roberts E, WPI; 1999-591315/50. Homo sapiens. 24-MAR-1999; 27-MAR-1998; WO9950403-A2 19-JUN-2000 07-0CT-1999 Pavco PA, AAA22502; RESULT 1187 

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl cleaving activity, which specifically cleave RNA encoded by an aryl contemporation alpha 6 subunit gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA1915 to AAA1762 represent ribozyme sequences for AAA1915 to AAA1915 represent ribozyme sequences; AAA1916 to AAA2168 represent their corresponding target sequences; AAA2168 to AAA2168 arepresent their corresponding target sequences; AAA2168 to AAA2168 arepresent their corresponding target sequences; AAA2168 to AAA2168 to AAA2168 are AAA2168 to AAA2168 to

Sequence 17 BP; 3 A; 5 C; 7 G; 0 T; 2 U; 0 Other;

integrin subunit alpha-6, or integrin subunit beta-3

; 0 3.9%; Score 11.2; DB 1; Length 17; 5.0%; Pred. No. 7.9e+02; 3; Indels

Gaps Pred. No. 7.9e 1; Mismatches 12; Conservative Best Local Similarity Matches 12; Conserv

°;

```
1 CAGGGUCUCCCAGGAG 16
CAGCGAGTCCCAGGAG
705
              g
à
```

RESULT 1188 **AAA**18793 

AAA18793 standard; RNA; 17 BP.

AAA18793;

19-JUN-2000 (first entry)

Human TIE-2 substrate sequence SEQ ID NO:2019.

Human; aryl hydrocarbon nuclear transport, ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiinflammatory; antiarthritic; antipsoriatic; ARMD; dermatcological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; verruca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

Homo sapiens.

WO9950403-A2

07-0CT-1999.

99WO-US006507. 24-MAR-1999; 98US-0079678P. 27-MAR-1998;

(RIBO-) RIBOZYME PHARM INC.

Coeshott C, Mcswiggen JA; Jarvis T, Pavco PA, Roberts E,

WPI; 1999-591315/50,

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

Claim 56; Page 117; 305pp; English.

The present internation describes engiged.

Cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARWT) gene, an integrin subunit beta 3 gene, an integrin subunit beta 3 dene, an integrin subunit beta 3 dene, an integrin subunit beta 3 dene, and AAA17163 to AAA1762 represent ribozyme sequences for ARA18385 and AAA1987 to Corresponding target sequences; AAA17681 to AAA18385 and AAA1987 to Corresponding target sequences; AAA19154 represent ribozyme sequences for Tie-2, and AAA18386 to AAA1987 to AAA19122 represent their corresponding target sequences; AAA19122 to AAA21561 to AAA11561 to AAA21561 to AAA21562 to AAA21560 and AAA21689 to AAA21689 represent their corresponding target sequences; AAA21689 to AAA21689 represent their corresponding target sequences for integrin alpha 6 subunit, and AAA23362 to AAA23343 to AAA22475 and AAA22475 to AAA23342 represent ribozyme soft for integrin subunit beta 3, and AAA23476 to AAA23362, AAA23343 to Corresponding target sequence for integrin subunit beta 3, and AAA2476 to AAA23362, AAA23343 to the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, corresponding of tuberous scleeneration, psoriasis, verruca vulgaris, and ottuberous and diseases related to the syndrome, Kippel-Trenaunay-Weber schale to the levels of ARNT, Tie-2, and other syndromes and diseases related to the levels of ANA1900. present invention describes enzymatic nucleic acid molecules with RNA integrin subunit alpha-6, or integrin subunit beta-3

Sequence 17 BP; 3 A; 6 C; 5 G; 0 T; 3 U; 0 Other;

```
ö
                         Gaps
                         ö
  Length 17;
                         Indels
3.9%; Score 11.2; DB 1;
62.5%; Pred. No. 7.9e+02;
tive 3; Mismatches 3;
                                                 736
                                                 721 AGTGACTCTGGTCATA
                        10; Conservative
 Query Match
Best Local Similarity
                         Matches
                                                 ð
```

2 AGGGACUCUGGCCCUA 17

qq

RESULT 1189

AAA21355 standard; RNA; 17 BP 

AAA21355;

19-JUN-2000 (first entry)

Integrin alpha 6 subunit substrate sequence SEQ ID NO:4581.

Human; aryl hydrocarbon nuclear transport; ARNT; TIE-2; angiogenesis; integrin alpha 6 subunit; integrin subunit beta 3; hairpin ribozyme; hammerhead ribozyme; angiogenic factor; cytostatic; antidiabetic; ophthalmologic; antiniflammatory; antiarthritic; antipsoriatic; ARMD; dermatological; RNA cleavage; cancer; diabetic retinopathy; arthritis; age related macular degeneration; inflammation; neovascular glaucoma; myopic degeneration; psoriasis; vertuca vulgaris; angiofibroma; tuberous sclerosis; pot-wine stain; Sturge Weber syndrome; Kippel-Trenaunay-Weber syndrome; Osler-Weber-Rendu syndrome; ss.

Homo sapiens.

W09950403-A2

07-OCT-1999.

99WO-US006507. 24-MAR-1999; 98US-0079678P. 27-MAR-1998;

(RIBO-) RIBOZYME PHARM INC.

Mcswiggen JA; Coeshott C, Jarvis T, Roberts E, Pavco PA,

WPI; 1999-591315/50.

Novel ribozymes for modulating the synthesis, expression and/or stability of an mRNA encoding an angiogenic factors.

Claim 55; Page 203; 305pp; English.

The present invention describes enzymatic nucleic acid molecules with RNA cleaving activity, which specifically cleave RNA encoded by an aryl hydrocarbon nuclear transporter (ARMT) gene, an integrin alpha 6 subunit gene, an integrin subunit beta 3 gene, an integrin alpha 6 subunit gene, or a Tie-2 gene. AAA16775 to AAA1761 and AAA17621 to AAA17622 represent ribozyme sequences for ARNT, and AAA17168 to AAA17623 to AAA17684 represent their corresponding target sequences; AAA17685 to AAA18385 and AAA19087 to AAA19155 to AAA19223 to Expresent their corresponding target sequences; AAA1665 to AAA18386 and AAA19086 to AAA1923 to AAA1923 to AAA1923 to AAA19250 to Expresent ribozyme sequences; for Tie-2, and AAA18386 to AAA19086 sequences; for integrin alpha 6 subunit, and AAA20362 to AAA21500 and AAA21596 to AAA21688 represent their corresponding target sequences; AAA21699 to AAA22475 and AAA22476 to AAA3342 represent riboxyme sequence for integrin subunit beta 3, and AAA22476 to AAA23262, AAA2343 to AAA2242 represent their corresponding target sequences. The riboxymes of the invention are used for modulating the synthesis, expression and/or stability of an mRNA encoding angiogenic factor, especially ARNT, integrin subunit beta-3, integrin subunit alpha-6, or Tie-2. They are especially used to treat cancer, diabetic retinopathy, age related meacular degeneration (ARMD), inflammation, and arthritis, as well as neovascular glaucoma, myopic degeneration, psoriasis, verruca vulgaris, angiofibroma of tuberous sclerosis, pot-wine stains, Sturge Weber

5555X8

ð q

```
RESULT 1191
                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                     AAV93440/
                                                                                                                                                                                                                        Best
 8888888888
                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                       ò
                                                                                                                                      ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A method has been developed for the identification of a nucleic acid capable of modulating a process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (b) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with endonuclease activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to cleave target nucleic acid, particularly for treating systemic diseases
                                                                                                                                                                                                                                                                                                                                                                                                                    Human, c-raf, A-raf, B-raf, hammerhead ribozyme, hairpin ribozyme, target; substrate; catalyst; modulation; expression; Raf gene; delivery; screening; identification; synthesis; deprotection; purification; cancer; inflammation; psoriasis; non-hepatic ascites; infection; genetic drift; restenosis; rheumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Identifying new catalytic nucleic acid that modulates selected processes especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.
syndrome, Kippel-Trenaunay-Weber syndrome, Osler-Weber-Rendu syndrome, and other syndromes and diseases related to the levels of ARNT, Tie-2, integrin subunit alpha-6, or integrin subunit beta-3
                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bellon L;
                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Burgin A;
                                                                                                   Score 11.2; DB 1; Length 17;
Pred. No. 7.9e+02;
0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Karpeisky A,
Sweedler D;
                                                                    Sequence 17 BP; 4 A; 3 C; 2 G; 0 T; 8 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Beigelman L, Mcswiggen JA,
J, Workman CT, Beaudry A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 177; Page 160; 259pp; English.
                                                                                                                                                                                                                                                                                                                                                                                         Human A-Raf substrate position 1748.
                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-0049002P.
97US-0051718P.
97US-0056808P.
97US-0061321P.
97US-0061324P.
                                                                                                                                                                                                                                                                                       BP.
                                                                                                                                                                     942 ATTTTACGCAAGAAGA 957
                                                                                                      3.98;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             -0064866P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-US009249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97US-0046059P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97US-0064866P
97US-0068212P
                                                                                                                   81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                     AAV92575 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                   17 ATTTCCGGAAAAAGA
                                                                                              Ouery Match
Best Local Similarity 81.2'
Matches 13, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-009494/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9850530-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            05-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Thompson J,
                                                                                                                                                                                                                                                                                                                                                       18-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            09-JUL-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            22-AUG-1997
02-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           02-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             05-NOV-1997
                                                                                                                                                                                                                                                                                                                      AAV92575;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Parry T,
                                                                                                                                                                                                                                                      RESULT 1190
                                                                                                                                                                                                                                                                       AAV9257
```

```
0
caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic ascites and infection. They may also be used to detect genetic drift and mutations in diseased cells and to determine c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate expression of the Raf gene, are
                                                                                                                         used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of c-raf. Introduction of sugar/phosphate modifications increases stability against nuclease and activity, AAV90922 to AAV9387 represent NACs that can be used in the method, specifically for modulating the expression of a Raf gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human, c-raf, A-raf, B-raf, hammerhead ribozyme; hairpin ribozyme; bushstate, catalyyst, modulation, expression; Raf gene, delivery, screening, identification, synthesis; deprotection, purification; cancer, inflammation, psoriasis; non-hepatic ascites; infection; genetic drift;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A method has been developed for the identification of a nucleic acid capable of modulating a process in a biological system. The method comprises: (a) introducing into the system a random library of nucleic acid catalysts (NAC) having a substrate binding domain (SBD), comprising
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates
                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bellon L;
                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Burgin A;
                                                                                                                                                                                                                                                                                                                                                                              3.9%; Score 11.2; DB 1; Length 17; 56.2%; Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                            3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kisich K,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Reynolds M, Kisich K,
ggen JA, Karpeisky A,
udry A, Sweedler D;
                                                                                                                                                                                                                                                                                                                      Sequence 17 BP; 5 A; 3 C; 2 G; 0 T; 7 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human B-raf substrate nucleotide position 940.
                                                                                                                                                                                                                                                                                                                                                                                                                                            4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Jarvis T, Matulic-Adamic J, Reynolds
Parry T, Beigelman L, Mcswiggen JA,
Thompson J, Workman CT, Beaudry A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           used as antiviral agents and synthons.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             restenosis; rheumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim 177; Page 168; 259pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97US-0046059P.
97US-0049002P.
97US-0051718P.
97US-0056808P.
97US-0061321P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          909 GATCAGATTATCATCA 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              || |||||::|:| : |
GACCAGAUUAUCUUUA 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97US-0061324P.
97US-0064866P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-US009249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97US-0068212P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (RIBO-) RIBOZYME PHARM INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV93440 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                               9; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-009494/01.
                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WO9850530-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                05-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12-NOV-1998.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-MAY-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         22-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              09-JUN-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       02-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-OCT-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAV93440;
                                                                                                                                                                                                                                                                                                                                                                              Query Match
```

```
a random sequence, and a catalytic dowain (CD); and (b) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with cendonuclease activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to clave target nucleic acid, particularly for treating systemic diseases caused by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic ascites and infection. They may also be used to detect genetic drift and mutations in diseased cells and to determine c-raf RNA. Specifically NACs with RNA-clearing activity that modulate expression of the Raf gene, are used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or cused to treat condition associated with the level of c-raf. Introduction of sugar/phosphate modifications increases stlavily any condition accordated with the level of c-raf. Introduction of sugar/phosphate modifications increases stlavily, and sainst nuclease and activity. AAV90922 to AAV303877 represent NACs that can be used in the conditionally for modulating the expression of a Raf gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human; c-raf; A-raf; B-raf; hammerhead ribozyme; hairpin ribozyme;
target; substrate; catalyst; modulation; expression; Raf gene; delivery;
szcening; identification; synthesis; deprotection; purification; cancer;
inflammation; psoriasis; non-hepatic ascites; infection; genetic drift;
restenosis; rheumatoid arthritis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.9%; Score 11.2; DB 1; Length 17;
31.2%; Pred. No. 7.9e+02;
ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human C-raf target site nucleotide position 1795.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 5 A; 4 C; 2 G; 0 T; 6 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    97US-0056808P.
97US-0061321P.
97US-0061324P.
97US-0064866P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           729 TGGTCATAGGACTTGG 744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97US-0046059P.
97US-0049002P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98WO-US009249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97US-0051718P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81.28;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAV91205 standard; RNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
nes 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO9850530-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       05-MAY-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          02-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18-FEB-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        12-NOV-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         , 7661-NUL-60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               03-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               22-AUG-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  02-OCT-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAV91205;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAV91205

XX
 AC AAV9
 XX
 AAV9
 XX
 AAV9
 DE Huma
 XX
 BDE Huma
 XX
 CAV9
 DE Huma
 XX
 CAV9
 C
              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
```

Identifying new catalytic nucleic acid that modulates selected processes - especially ribozymes that cleave Raf RNA for treating cancer, restenosis, and also new ribozymes and modified nucleoside triphosphates used as antiviral agents and synthons.

Jarvis T, Matulic-Adamic J, Reynolds M, Kisich K, Parry T, Beigelman L, Mcswiggen JA, Karpeisky A, Thompson J, Workman CT, Beaudry A, Sweedler D;

WPI; 1999-009494/01.

97US-0068212P

(RIBO-) RIBOZYME PHARM INC.

```
capable of modulating a process in a biological system. The method acid catalysts (NAC) having a bubstrate binding domain (SBD), comprising a random sequence, and a catalytic domain (CD); and (B) identifying NAC in systems where modulation has occurred and/or determining the sequence of at least part of the SBDs in such systems. Nucleic acid molecules with endonuclease activity and catalytic activity, from the present invention, are used to modulate gene expression in plant and mammalian cells and to cleave target nucleic acid, particularly for treating systemic diseases assensed by specific RNA, e.g. cancer, inflammation, psoriasis, non-hepatic acides and infection. They may also be used to detect genetic drift and mutations in diseased cells and to determine c-raf RNA. Specifically NACs with RNA-cleaving activity that modulate expression of the Raf gene, are
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ò
                                                                                                                                                                                                                                                                                                                           used to treat cancer, restenosis, psoriasis or rheumatoid arthritis, or generally any condition associated with the level of c-raf. Introduction of sugar/phosphate modifications increases stability against nuclease activity. AAV99922 to AAV93877 represent NACs that can be used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Antisense oligonucleotide; multiple target; antisense treatment; impaired respiration; inflammation; lung disease; pulmonary vasconstriction; inflammation; allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                       activity. AAV90922 to AAV93877 represent NACs that can be used in the method, specifically for modulating the expression of a Raf gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                    A method has been developed for the identification of a nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New antisense oligonucleotides used in treatment of, e.g. pulmonary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human adenosine Al receptor antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    .,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 11.2; DB 1; Length 17;
Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 17 BP; 6 A; 5 C; 3 G; 0 T; 3 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Mismatches
Claim 177; Page 150; 259pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             905 CTGCGATCAGATTATC 920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97US-0059160P.
98US-00093972.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2 CCGAGAUCAGAUCAUC 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98WO-US019419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAX53288 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 3.9
Best Local Similarity 62.5
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              prostate cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1999-229400/19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               vasoconstriction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WO9913886-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      25-MAR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX53288;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Nyce JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX53288/
ਨੋ
```

```
The specification describes antisense oligonucleotides (AAX52869-X55271)

directed against at least 2 mRNAs selected from target genes, coding and
non-coding regions of RNAs corresponding to target genes, coding and
condons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'
end and the juxta-section between coding and non-coding regions and all
segments of RNAs encoding proteins associated with one or more diseases,
conditions or mixtures. The antisense oligonucleotides may be derived
from sequences AAX5512-74. These multiple target oligonucleotides
conditions or mixtures. Typical diseases and conditions are those
diseases and conditions. Typical diseases and conditions are those
associated with impaired respiration and inflammation, including lung
diseases, pulmonary vasoconstriction, inflammation, allergic rhinitis,
diseases, pulmonary vasoconstriction, inflammation, respiratory
distress syndrome, pain, cystic fibrosis, pulmonary hypertension,
pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary
disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g.
colon cancer, breast cancer, lung cancer, pancer, metastases, as
well as all types of cancers which may metastasize or have metastasized
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            impaired respiration; inflammation; lung disease; pulmonary vasconstriction; inflammation; allergic rhinitis; pulmonary vasconstriction; inflammation; allergic rhinitis; acute asthma; allergy; asthma; impeded respiration; respiratory distress syndrome; pain; cystic fibrosis; pulmonary hypertension; pulmonary vasconstriction; emphysema; chronic obstructive pulmonary disease; leukemia; lymphoma; carcinoma; colon cancer; breast cancer; lung cancer; pancreatic cancer; hepatocellular carcinoma; kidney cancer; melanoma; hepatic metastasis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Antisense oligonucleotide; multiple target; antisense treatment;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Human adenosine Al receptor antisense oligonucleotide fragment.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 11.2; DB 1; Length 17;
Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                   to the lungs, including breast and prostate cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 6 A; 1 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                    Disclosure; Page 33; 120pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAX53320 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                807 CCTCCAACTCAGGGTT 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98WO-US019419.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        98US-00093972,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.9%;
Best Local Similarity 81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97US-0059160P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  05-JUL-1999 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         prostate cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17-SEP-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      17-SEP-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        09-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9913886-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            25-MAR-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAX53320;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Nyce JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAX53320,
à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
```

WPI; 1999-229400/19.

codons, genomic flanking regions, intron-exon borders, the 5'-end, the 3'-end and the juxta-section between coding and non-coding regions and all segments of RNAs encoding proteins associated with one or more diseases, conditions or mixtures. The antisense oligonuclectides may be derived from sequences AAX55272-74. These multiple target oligonuclectides (specifically AAX55108-271) can be used for the antisense treatment of diseases and conditions. Typical diseases and conditions are those associated with impaired respiration and inflammation, including lung diseases, pulmonary vasoconstriction, inflammation, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, pulmonary vasoconstriction, emphysema, chronic obstructive pulmonary of disease (COPD), and cancers such as leukemias, lymphomas, carcinomas e.g. colon cancer, breast cancer, lung cancer, melandma, parts metastases, as ; 0 The specification describes antisense oligonucleotides (AAX52869-X55271) directed against at least 2 mRNAs selected from target genes, coding and non-coding regions of RNAs corresponding to target genes, gene initiation AAX61849-X61982 and AAX62002-X62093 represent PCR primers and probes used hepatocellular carcinoma, kidney cancer, melanoma, hepatic metastases, a well as all types of cancers which may metastasize or have metastasized to the lungs, including breast and prostate cancer Gaps New antisense oligonucleotides used in treatment of, e.g. pulmonary PCR primer; probe; human papillomavirus; HPV; A region; B region; C region; D region; detection; HPV genotype; cervical cancer; ss. ., 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; ive 0; Mismatches 3; Indels Detection and identification of human papillomavirus Ter Schegget J; Sequence 17 BP; 6 A; 1 C; 8 G; 2 T; 0 U; 0 Other; Disclosure; Page 34; 120pp; English. HPV type-specific probe HPV53 Pr1. Quint W, Kleter B, (INNO-) INNOGENETICS NV. (DELF-) DELFTS DIAGNOSTIC LAB BV. Claim 8; Page 38; 78pp; English 822 AAX62029 standard; DNA; 17 BP. 97EP-00870136. 98WO-EP005829. 16 cércéaréréagerrr 1 (first entry) 807 CCTCCAACTCAGGGTT 13; Conservative Human papillomavirus. WPI; 1999-244048/20. Best Local Similarity vasoconstriction Van Doorn L, WO9914377-A2. 31-AUG-1999 14-SEP-1998; 16-SEP-1997; 25-MAR-1999. Synthetic AAX62029; Query Match RESULT 1195 Matches **AAX**62029 à g 

```
biological sample. The method comprises amplification of a polymuclar detecting analytication of a polymuclar acid fragment of HPV using a 5-primer specifically hybridizing to the A region or B region of the genome of at least one HPV type, and a 3-primer specifically hybridizing to the C region of at least one HPV type, and by primer specifically hybridization with the D region of at least one HPV type, and by primer is pecifically hybridization with the D region of at least one HPV type. The primers individually or as a combination of 5-primer and 3-primer, and the probes are used in the detection and/or identification of HPV present in a biological sample. An isolated HPV polymucleotide, or identification of HPV present in a sample. Identification of the different HPV generation of HPV present in a sample. Identification of the different HPV generation of HPV present in a sample. Identification of the different HPV generation of cervical and epidemiological
detecting and/or identifying human papillomavirus (HPV) present in a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17 BP; 5 A; 3 C; 5 G; 4 T; 0 U; 0 Other;
```

3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; 3; Indels Pred. No. 7.9e ); Mismatches .; 0 81.2%; Conservative Local Similarity les 13; Conserv Query Match Matches

Gaps

·,

859 GGCTCCAGTTGGAACA 874 GGCATCTGTTGGAACA 16 ⋩

AAX23128 standard; DNA; 17 11-JUN-1999 AAX23128; RESULT 1196 AAX23128 

BP.

Human kallikrein PCR primer #1. (first entry)

Kallikrein; human; atrial natriuretic peptide; treatment; renal disorder; cardiac disorder; nephrotoxicity; renal damage; tubular injury; ischemia; glomerulosclerotic lesion; renal failure; nephrotic syndrome; restenosis; diabetic nephrotrophy; cardiac hypertrophy; heart failure; angioplasty; myocardial infarction; cerebrovascular disorder; tubular regeneration; occlusive artery disorder; vascular smooth muscle cell growth; neointimal formation; blood vessel; PCR primer; ss.

Synthetic

Homo sapiens.

W09912576-A2

18-MAR-1999.

98WO-US019267 11-SEP-1998;

(MUSC-) MUSC FOUND RES DEV.

97US-0058511P

11-SEP-1997;

Chao J; Chao L,

WPI; 1999-214919/18

Delivering tissue kallikrein and atrial natriuretic peptide to a cell for prevention and treatment of non-hypertension-associated renal and cardiac disorders.

Example 1; Page 111; 120pp; English

This invention describes a novel method for delivering tissue kallikrein and atrial natriureric peptide to a cell which can be used in the treatment of non-hypertension-associated renal and cardiac disorders. Non hypertension-associated renal disorders include renal injury, nephrotoxicity, nonhypertension-associated renal disease, salt-induced

```
renal damage, chronic renal failure, nephrotic syndrome and diabetic cardiac hypertension-associated cardiac disease, heart failure after cardiac uspertension-associated cardiac disease, heart failure after cardiac surgery, cardiac injury after myocardial infarction, myocardial ischemia, congestive heart failure and restenosis following angioplasty. The encoding nucleic acids can also be used for preventing and or treating the following: cerebrovascular disorders, injury caused by drug induced and/or salt induced nephrotoxicity and chronic renal failure and inhibiting vascular smooth muscle cell growth and/or inhibiting neointimal formation in blood vessel and stimulating
glomerulosclerotic lesions, tubular injury, drug-induced
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  renal tubular regeneration and/or reversing pre-existing renal injury
```

Sequence 17 BP; 7 A; 5 C; 2 G; 3 T; 0 U; 0 Other;

Gaps .. Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 7.9e+02; Matches 13; Conservative 0; Mismatches 3; Indels 838 CTICTCTGAAGACAGC 853 1 CTTCACATAAGACAGC 16 ð

0

RESULT 1197 AAX23156

BP AAX23156 standard; DNA; 17

AAX23156;

Human kallikrein PCR primer #10. 11-JUN-1999 (first entry)

Kallikrein; human; atrial natriuretic peptide; treatment; renal disorder; cardiac disorder; nephrotoxicity; renal damage; tubular injury; ischemia; glomerulosoclerotic lesion; renal failure; nephrotic syndrome; restenosis; diabetic nephrotrophy; cardiac hypetroxphy; heart failure; angioplasty; myocardial infarction; cerebrovascular disorder; tubular regeneration; occlusive artery disorder; vascular smooth muscle cell growth;

Synthetic.

neointimal formation; blood vessel; PCR primer; ss.

Homo sapiens. 

W09912576-A2 18-MAR-1999.

98WO-US019267 11-SEP-1998; 97US-0058511P 11-SEP-1997;

(MUSC-) MUSC FOUND RES DEV

Chao L,

WPI; 1999-214919/18.

Delivering tissue kallikrein and atrial natriuretic peptide to a cell for prevention and treatment of non-hypertension-associated renal and cardiac disorders.

Example 1; Page 70; 120pp; English.

This invention describes a novel method for delivering tissue kallikrein and atrial natriuretic peptide to a cell which can be used in the treatment of non-hypertension-associated renal and cardiac disorders. Non-hypertension-associated renal disorders include renal injury, nephrotoxicity, nonhypertension-associated renal disease, salt-induced renal damage, glomerulosolerotic lesions, tubular injury, drug-induced renal damage, chronic renal failure, nephrotic syndrome and diabetic

```
o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Primer PDR12-31 was used with primer PDR12-32 (see AAZ20263) for the PCR amplification of an 840 bp 3' fragment of the Saccharomyces cerevisiae weak acid pump protein PDR12 gene. Yeast genomic DNA was used as template. The PCR product was used in the construction of a pdr12::hisg-URA3-hisG deletion plasmid. Constitutive overexpression of the PDR12 gene in yeast cells confers increased resistance to weak acids such as sorbate, propionate and benzoate, used e.g. as preservatives in foods and beverages. The invention provides a transformed yeast strain that constitutively expresses a gene encoding a weak acid pump. The yeast cells can be used for the production of a dough or bread product (claimed), and for the production of an alcoholic beverage (e.g. whisky, wine, or been) or other fermented product (claimed)
            cardiac hypertrophy, nonhypertension-associated cardiac disease, heart failure after cardiac surgery, cardiac injury after myocardial infarction, myocardial ischemia, congestive heart failure and restenosis following angiophasty. The encoding nucleic acids can also be used for preventing and or treating the following: cerebrovascular disorders, preventing and or treating the following: cerebrovascular disorders, injury caused by disorders e.g. restenosis, renal damage and/or renal injury caused by drug induced and/or salt-induced nephrotoxicity and chronic renal failure and inhibiting vascular smooth muscle cell growth and/or inhibiting neointimal formation in blood vessel and stimulating
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     weak acid pump; yeast; ABC transporter; leavening; gassing power; bread; dough; alcoholic beverage; wine; beer; brewing; whisky;
nephrotrophy, and non-hypertension-associated cardiac disorders include
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        New transformed yeast cells, used for the production of e.g. dough or bread products, alcoholic beverages or other fermented products.
                                                                                                                                                                                                         renal tubular regeneration and/or reversing pre-existing renal injury
                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                               ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Yeast weak acid pump protein PDR12 gene PCR primer PDR12-31.
                                                                                                                                                                                                                                                                                    3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 7.9e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                               Sequence 17 BP; 7 A; 5 C; 2 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Kuchler K;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Example 6; Page 14; 44pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BP
                                                                                                                                                                                                                                                                                                                                                                        838 CTTCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99WO-EP002518.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98EP-00201094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ20262 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17-JAN-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                             1 CTTCACATAAGACAGC
                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 81.2?
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Piper P,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             cerevisiae.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 1999-611043/52.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR; primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Van Rooijen RJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (STAM ) DSM NV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Saccharomyces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    07-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             07-APR-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WO9951746-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAZ20262;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             baking;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pdr12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAZ20262,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
5555555555555X8
                                                                                                                                                                                                                                                                                                                                                                                                             qq
```

Sequence 17 BP; 3 A; 5 C; 5 G; 4 T; 0 U; 0 Other;

```
.;
0
                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     This sequence represents a PCR primer for DNA encoding the human integrin cell surface receptor subunit beta6 (I) of the invention. (I) is involved in adhesion of cells with each other and with extracellular matrix. Increased expression of (I), or preventing binding by (I), is used to modulate cellular adhesion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New human integrin cell surface receptor subunit beta-6, modulator of
                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PCR primer for integrin cell surface receptor subunit Beta6 gene.
                                                                                                                                                                                                                        PCR primer for integrin cell surface receptor subunit Beta6 gene.
                                                                                                                                                                                                                                             Integrin cell surface receptor subunit beta6; cellular adhesion; extracellular matrix; human; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
                            ;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 7.9e+02;
ive 0; Mismatches 3; Indels
3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 7.9e+02;
.ive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 17 BP; 5 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Quaranta V;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 1; Col 17; 44pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAZ31502 standard; DNA; 17 BP.
                                                       890
                                                                                                                                             AAZ31503 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 853
                                                                                                                                                                                                                                                                                                                                                                                91US-00728215.
                                                                                                                                                                                                                                                                                                                                                                                                         91US-00728215.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16
                                                                      17 CCTGCATGAGATGCAC 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (first entry)
                                                                                                                                                                                               (first entry)
                                                      875 CTTTCCTGAGATGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               838 CTTCTCTGAAGACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CATCTCCGAAGACGGC
 Query Match 3.9
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                              (SCRI ) SCRIPPS RES INST
                                                                                                                                                                                                                                                                                                                                                                                                                                  CALIFORNIA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pytela R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-579625/49.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cell adhesion
                                                                                                                                                                                                                                                                                                     Homo sapiens.
                                                                                                                                                                                                                                                                                                                                                                                                                                  (REGC ) UNIV
                                                                                                                                                                                                                                                                                                                                                                               11-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                         11-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         06-JAN-2000
                                                                                                                                                                                                 06-JAN-2000
                                                                                                                                                                                                                                                                                                                            US5962643-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sheppard D,
                                                                                                                                                                                                                                                                                                                                                       05-0CT-1999
                                                                                                                                                                                                                                                                                       Synthetic
                                                                                                                                                                        AAZ31503;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAZ31502;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1200
                                                                                                                     RESULT 1199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAZ31502
                                                                                                                                    AAZ31503
                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Db
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEX PX PX BX
                                                                               엄
                                                       à
```

```
ô
                                                                                                                                                                                                                                                                                            This sequence represents a PCR primer for DNA encoding the human integrin cell surface receptor subunit beta6 (I) of the invention. (I) is involved in adhesion of cells with each other and with extracellular matrix. Increased expression of (I), or preventing binding by (I), is used to
                                                                                                                                                                                                                                     New human integrin cell surface receptor subunit beta-6, modulator of cell adhesion.
                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
Integrin cell surface receptor subunit beta6; cellular adhesion; extracellular matrix; human; PCR primer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                          .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tRNA; probe; mouse; codon usage; gene therapy;
                                                                                                                                                                                                                                                                                                                                                                                  3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 7.9e+02;
tive 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 5 A; 6 C; 4 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                             Quaranta V;
                                                                                                                                                                                                                                                                        Example 1; Col 17; 44pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                838 CTTCTCTGAAGACAGC 853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97AU-00007765.
97AU-00009467.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98WO-AU000530,
                                                                                                                91US-00728215
                                                                                                                                      91US-00728215.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 CATCTCCGAAGACGGC 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAX07036 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                         modulate cellular adhesion
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                           (REGC ) UNIV CALIFORNIA. (SCRI ) SCRIPPS RES INST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (UYOU ) UNIV QUEENSLAND
                                                                                                                                                                                           Sheppard D, Pytela R,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Thr (ACA) tRNA probe.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WPI; 1999-120895/10
                                                                                                                                                                                                                   WPI; 1999-579625/49
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Zhou J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Transfer RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             keratinocyte;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WO9902694-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                09-JUL-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-JUL-1997;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11-SEP-1997;
                                                Homo sapiens
                                                                                                                 11-JUL-1991;
                                                                                                                                       11-JUL-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10-MAY-1999
                                                                     US5962643-A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21-JAN-1999
                                                                                          05-0CT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Frazer I,
                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAX07036;
                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mus sp.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1201
     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
```

```
This is the nucleotide sequence of a Thr(ACA) tRNA probe. 22 tRNA probes (see AAX07017-38) are provided, each being specific for a particular isoacceptor transfer RNA. They were used to determine the relative bundance of tRNA species in undifferentiated and differentiated mouse keratinocytes. tRNAs can be extracted from a cell or tissue, fixed to a solid support and used in Mybridisation experiments with the tRNA probes. Results showed that tRNAs specific for Ala(GCA), Leu(CTY) and Leu(CTA) and Leuc(TTA) are increased in differentiated cells, while tRNAs or Arg(CGA), Pro(CCI) and Asn(AAA) were more abundant in undifferentiated experimency tes. The invention arises from the discovery that the relative abundance of different isoaccepting tRNAs varies in different cells or tissues, or in calls and tissues in different sates of differentiation or in different cogether with the codon composition of a gene to regulate and direct expression of a protein to a particular cell or tissue, or to a cell or tissue in a specific state of differentiation or in a specific stage of the cell cycle. This is particularly useful for gene therapy and for the choice of production of virus particules in cycling eukaryotic cells
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ó
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antiallergic; antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
               Synthetic nucleic acid with at least one codon replaced by a synonym for producing viral particles and in gene therapy.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match

3.9%; Score 11.2; DB 1; Length 17;

Best Local Similarity 81.2%; Pred. No. 7.9e+02;

Matches 13; Conservative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cancer; leukaemia; lymphoma; carcinoma; metastasis; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Low adenosine antisense oligonucleotide SEQ ID NO:420.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 6 A; 1 C; 6 G; 4 T; 0 U; 0 Other;
                                                                                Example 9; Page 58; 129pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         836 TTCTTCTCTGAAGACA 851
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         98US-0095212P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99WO-US017712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 TICTCTTCTCAAGACA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA32731 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (UYEC-) UNIV EAST CAROLINA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              28-JUL-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2000-205971/18.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WO200009525-A2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                03-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         03-AUG-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   24-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAA32731;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Nyce JW;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAA32731
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
```

bronchitis, emphysema, respiratory distress syndrome, ischemia or

```
impeded respirations, pulmonary vasoconstriction, allergies, asthma, impeded respiration, respiratory distress syndrome, pain, cystic impeded respiration, respiratory distress syndrome, pain, cystic impeded respiration, respiratory distress syndrome, pain, cystic carbonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD) and cancers such as leukaemias, lymphomas, carcinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the ONs reduces side effects. The A-containing ONS break down with the relaces of deoxyadenosine which activates adenosine receptors causing bronchoconstriction and inflammation. AAA32313 to AAA3512 represent the nucleotide sequences given in the sequence listing from the present circumbers are also called SEQ ID No:1 to 185, but the sequences differ from the previously named sequences. SEQ ID No:1 to 1880 (AAA2333 to AAA3392) are specifically claimed ONS from the present invention. N B. Sequences given in the disclosure of the present invention do not match of the preint corresponding SEQ ID NO: sequences given in the sequence
                                                                                                                                                   present invention describes a new composition comprising an antisense
                                                                                                                                                                     oligonucleotide (ON) with low adenosine (up to 15%), which targets nucleic acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic activities. The compositions are useful for the treatment of diseases associated with inflammation, impaired airways, including lung disease and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating
                                                                                 Claim 18; Page 320; 1343pp; English.
```

; 0 Gaps . 3.9%; Score 11.2; DB 1; Length 17; 11.2%; Pred. No. 7.9e+02; ve 0; Mismatches 3; Indels Sequence 17 BP; 6 A; 1 C; 8 G; 2 T; 0 U; 0 Other; 81.2%; Ouery Match
Best Local Similarity 81.2'
Matches 13, Conservative

CCTCCAACTCAGGGTT 822

807

à d

17 ccrccarcrcagerrr

AAA32763 standard; DNA; 17 BP 28-JUL-2000 (first entry) AAA32763; RESULT 1203 AAA32763/ 

Low adenosine antisense oligonucleotide SEQ ID NO:452.

antiallergic, antiasthmatic; cytostatic; analgesic; impaired airway; lung disease; ischaemic condition; pulmonary vasoconstriction; asthma; respiratory distress syndrome; pain; cystic fibrosis; emphysema; pulmonary hypertension; chronic obstructive pulmonary disease; COPD; cancer; leukaemia; lymphoma; carcinoma; metastasis; ss. Human; adenosine receptor; low adenosine antisense oligonucleotide; phosphorothioate; impaired respiration; inflammation; allergy; allergic disease; bronchoconstriction; inhibitor; antiinflammatory;

Homo sapiens.

WO200009525-A2.

03-AUG-1999;

98US-0095212P 03-AUG-1998;

99WO-US017712

(UYEC-) UNIV EAST CAROLINA.

```
Nyce JW;
```

New antisense oligonucleotides useful for treating e.g. pulmonary vasoconstruction, inflammation, allergies, asthma, hypertension, bronchitis, emphysema, respiratory distress syndrome, ischemia or

The present invention describes a new composition comprising an antisense oligonucleotide (ON) with low adenosine (up to 15%), which targets coligonucleotide acids involved in bronchoconstriction, allergies, and/or inflammation. The ON can have antiinflammatory, antiallergic, antiasthmatic, cytostatic and analgesic associated with inflammation, impaired airways, including lung diseases associated with inflammation, impaired airways, including lung diseases and diseases whose secondary effects afflict the lungs of a subject. They can be used for treating ciffects afflict the lungs of a subject. They can be used for treating impeded respiration, respiratory distress syndrome, pain, cystic fibrosis, pulmonary hypertension, emphysema, chronic obstructive pulmonary disease (COPD), and cancers such as leukaemias, lymphomas, archinomas, and cancers which may metastasise to the lungs, including breast and prostate cancer. The reduction of the adenosine content of the CONs reduces side effects. The A-containing ONs break down with the content of the containing on the adenosine content of the containing of the adenosine content of the con bronchoconstriction and inflamation. AAA32313 to AAA35312 represent the nucleotide sequences given in the sequence listing from the present invention, which correspond to SEQ ID NO:1 to 2815, and then the last 185 sequences are also called SEQ ID NO:1 to 185, but the sequences differ from the previously named sequences. SEQ ID NO:11 to 1680 (AAA32323 to AAA3392) are specifically claimed ONs from the present invention. N.B. Sequences given in the disclosure of the present invention. On the with their corresponding SEQ ID NO: sequences given in the sequence

Gaps ; 0 Query Match 3.9%; Score 11.2; DB 1; Length 17; Best Local Similarity 81.2%; Pred. No. 7.9e+02; Matches 13; Conservative 0; Mismatches 3; Indels

0

822 807 CCTCCAACTCAGGGTT

δ

ABN86980 standard; RNA; 17 (first entry) 29-JUL-2002 ABN86980; 

Hepatitis C virus NS5B+ RNA oligonucleotide SEQ ID NO:18.

Simian virus 40; NS5B; viral infection; antiviral; cytostatic; HBV; antiallergic; immunosuppressive; gene therapy; AIDS; hepatitis B virus; cancer; leukaemia; genetic defect; allergy; autoimmune disease; familial genetic disease; primary genetic disease; ss. Prodrug ribozyme; ribozyme; SV40; HCV; hepatitis C virus; target;

Hepatitis C virus.

WO200014252-A1.

16-MAR-2000.

99WO-JP004767. 02-SEP-1999;

98JP-00249900. 03-SEP-1998;

WPI; 2000-205971/18.

Claim 18; Page 324; 1343pp; English.

Sequence 17 BP; 6 A; 1 C; 8 G; 2 T; 0 U; 0 Other;

16 CCTCCATCTCAGCTTT 1 RESULT 1204 d

(SUMU ) SUMITOMO PHARM CO LID.

rohdoh N, Yamamoto H,

```
The present invention describes a gene (I) encoding a ribozyme prodrug comprising an intervening sequence removable by splicing, and/or lacking KNA-cleaving activity. Also described are: (1) an expression vector comprising (I) and preferably further comprising a tissue-specific promoter; (ii) a ribozyme prodrug comprising a tissue-specific comprising (I) and preferably further comprising a tissue-specific cortivity; (iii) a drug composition comprising (I); and (iv) the in vivo cortivity; (iii) a drug composition comprising (I); and (iv) the in vivo production of mature ribozyme with RNA-cleaving activity by introducing (I) into a eukaryote. (I) has antiviral, cytostatic, antiallargic and immunosuppressive activities, and can be used in ribozyme and gene (I) into a eukaryote. (I) has antiviral, cytostatic, antiallargic and immunosuppressive activities, and can be used in ribozyme and gene cortivates, and hepatitis C virus (HCV), cancers including therapy. The ribozyme prodrug is useful e.g. in gene therapy, cortivers and hepatitis C virus (HCV), cancers including those of the liver, pancreas and colon, and leukaemia, and diseases consed by genetic defects such as allergy, autoimmune diseases, familial genetic diseases and primary genetic diseases. The ribozyme prodrug, without RNA-cleaving activity, is encoded by a gene with an intervening content and primary propersed to a gene with an intervening content and primary propersed by gene which can be spliced of fin cytoplasm contents.
                                                                                                                               Novel ribozyme prodrug without RNA-cleaving activity, for use e.g. gene therapy to treat viral infections, cancers and diseases due to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 17 BP; 1 A; 8 C; 4 G; 0 T; 4 U; 0 Other;
                                                                                                                                                                                                             Example 1; Page 83; 116pp; Japanese.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        782 CAGCCCCTCTGGTGCC 797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA03122 standard; DNA; 17 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99WO-US012775.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                98US-0088501P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 caeccugucuceuece 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                62.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19-MAY-2000 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 62.5
es 10; Conservative
                                                                                           WPI; 2000-256997/22
                                                                                                                                                                     defective genes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO9963938-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                08-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAA03122;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          셤
```

ó

```
Human; adenosine Al receptor; antisense oligonucleotide; hypoxia; adenosine Ab zeceptor; adenosine Ab zeceptor; adenosine Ab zeceptor; phosphorothioate; cardiopulmonary failure; renal failure; ischaemia; endotoxin release; ARDS; acute respiratory distress syndrome; cytoportective; anti-allergic; anti-inflammatory; anti-hypoxic; supraventricular tachycardia; allergic rhinitis; acute inflammation; chronic obstructive pulmonary disease; ss.
                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human adenosine Al receptor antisense oligonucleotide SEQ ID NO:406.
                                                                                                      ;
0
3.9%; Score 11.2; DB 1; Length 17; 52.5%; Pred. No. 7.9e+02; ve 3; Mismatches 3; Indels
```

adenosine A2a receptor; adenosine Ab receptor; adenosine A3 receptor; phosphorothicate; cardiopulmonary failure; renal failure; ischaemia; endotoxin release; ARDS; acute respiratory distress syndrome; erytoprotective; anti-allergic; anti-inflammatory; anti-hypoxic; supraventricular tachycardia; allergic rhinitis; acute inflammation; chronic obstructive pulmonary disease; ss.

Homo sapiens.

Synthetic

WO9963938-A2.

Human adenosine Al receptor antisense oligonucleotide SEQ ID NO:374. Human; adenosine Al receptor; antisense oligonucleotide; hypoxia;

807 CCICCAACTCAGGGIT 822

ò g

16 cércearcicagerri 1

AAA03090 standard; DNA; 17 BP.

RESULT 1206 AAA03090, 19-MAY-2000 (first entry)

AAA03090;

```
The present invention describes a pharmaceutical composition, comprising at least one agent (1) that prevents, alleviates and/or inhibits at least one agent (1) that prevents, alleviates and/or inhibits.

C(1) is an adenosine A2a receptor agonist (1a), or an oligomucleotide genes or corresponding RNA, to genomic flanking regions (1.e. 5' or 3' ends or segments between coding and non-coding sequences), or to all segments of mRNA encoding the adenosine A1, A2a, A2b or A3 agonist activity or A2a antagonist activity (or at least no agonist activity or A2a antagonist activity (or at least no agonist activity or A2a antagonist activity (or at least no agonist activity or A2a antagonist activity (or at least no agonist activity or this receptor). (1) may be a mixture of (1a) and optionally also contains one or more surfactants. The compositions are used to prevent, alleviate and/or treat adenosine compositions are used to prevent, alleviate and/or treat adenosine compositions are used to prevent, alleviate and/or renal damage or failure receptor-mediated cardiac, lung and/or renal damage or failure supraventricular tachycardia); (adult) respiratory distress syndrome (e.g. associated with sepsis); allergic rhinitis; chronic obstructive pulmonary disease; cardiopulmonary hypoxia associated with administration of stress test agents, particularly where such conditions are associated with acute inflammation. AAA02719, AAA02721 and AAA02723 to oligomucleotides for use in the composition of the present of the present of the prevent condition of the condi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                Novel composition for treating or preventing e.g. cardiopulmonary and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 17 BP; 6 A; 1 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 11.2; DB 1;
Pred. No. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                  Claim 17; Page 30; 252pp; English.
98US-00093972.
98US-0088657P.
                                                                                 (EPIG-) EPIGENESIS PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity 81.2
Matches 13; Conservative
                                                                                                                                                                                         WPI; 2000-116433/10
                                                                                                                                        Hill JL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         present invention
                                                                                                                                                                                                                                                                           renal injury.
09-JUN-1998;
                          09-JUN-1998;
                                                                                                                                        Nyce JW,
```

```
The present invention describes a pharmaceutical composition, comprising at least one agent (1) that prevents, alleviates and/or inhibits adenosine mediated cardiopulmonary and/or renal damage and/or failure.

(1) is an adenosine Aza receptor agonist (Ta), or an oligonoteotide genes or corresponding RNA, to genomic flanking regions (i.e. 5' or 3' ends or segments between coding and non-coding sequences), or to all has Al, Azo or Az agonist activity or Aza antagonist activity (or at least no agonist activity at this receptor). (I) may be a mixture of (Ia) and (Ib), and optionally also contains one or more surfactants. The compositions are used to prevent, alleviate and/or treat adenosine receptor-mediated cardiac, lung and/or renal damage or failure (particularly where associated with ischaemia, toxin release and/or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        administration of drugs or imaging agents, e.g. adenosine for treating supraventricular tachycardia); (adult) respiratory distress syndrome (e.g. associated with sepsies); allergic rhinitis; chronic obstructive pulmonary disease; cardiopulmonary hypoxia associated with administration of stress-test agents, particularly where such conditions are associated with acute inflammation. AAA02719, AAA02719, AAA02721 and AAA02723 to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA03715 represent specifically claimed phosphorothioate antisense oligonucleotides for use in the composition of the present invention. AAA02718, AAA02720, AAA02722 and AAA03716 to AAA03720 represent other phosphorothioate oligonucleotides used in the exemplification of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Low adenosine antisense oligonucleotide; phosphorothioate; allergy, human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antiinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction, pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS;
                                                                                                                                                                                                                                                                                                                                Novel composition for treating or preventing e.g. cardiopulmonary and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ٠.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Human adenosine Al receptor polynucleotide fragment #420.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 17 BP; 6 A; 1 C; 8 G; 2 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.2; DB 1;
11.2%; Pred. No. 7.9e+02;
.ve 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                 Claim 17; Page 30; 252pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAF18853 standard; DNA; 17 BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 807 CCTCCAACTCAGGGTT 822
                                                                99WO-US012775.
                                                                                                             98US-0088501P.
                                                                                                                                                      98US-0088657P.
                                                                                                                                                                                                (EPIG-) EPIGENESIS PHARM INC.
                                                                                                                                 98US-00093972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17 ccrccarcrcacrrr 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           14-MAR-2001 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3est_Local Similarity 81.2
4atches 13; Conservative
                                                                                                                                                                                                                                                                                      WPI; 2000-116433/10.
                                                                                                                                                                                                                                          Hill JL;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     present invention
                                                                                                                                                                                                                                                                                                                                                         renal injury
                                                              08-JUN-1999;
                                                                                                             08-JUN-1998;
                                                                                                                                 199-JUN-1998;
                                                                                                                                                      09-JUN-1998;
                  16-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAF18853;
                                                                                                                                                                                                                                            Nyce JW,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAF18853/c
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g
```

```
Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers
respiratory distress syndrome, pain, cystic fibrosis, allergic rhinitis, pulmonary hypertension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis;
                                                                                                                                                                                        and respiratory obstructions.
                                                                                                    99US-0127958P.
                                                                                     24-MAR-2000; 2000WO-US008020.
                                                                                                                   (UYEC-) UNIV BAST CAROLINA. (NYCE/) NYCE J W.
                                                                                                                                                         WPI; 2000-679539/66.
                                                      WO200062736-A2
                                        Homo sapiens.
                                                                                                   06-APR-1999;
                                                                      26-OCT-2000.
                           cancer; ss.
                                                                                                                                           Nyce JW;
```

Claim 14; Page 112; 1592pp; English.

The antibense oligoniclectides and (1) can be used to down-regulate the expression and or activity of target polypetides associated with lung/respiratory disorders and malignancies, such as stimulating and cacivating peptide factors and transmitters, transcription factors, immunoglobulins and antibodies, and their transcription factors, chemokines, endogenously produced specific and non-specific enzymes, chanding proteins, adhesion molecules and their receptors, cytokines and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system creceptors, and peripheral nervous and non-nervous system creceptors, binding proteins and malignancy associated proteins. The carismanse oligoniclectides and antismatical interest of the factors and/or bronchoconstruction and/or lung inflammation, allergy (ies) and/or and/or bronchoconstruction (especially pulmonary obstruction and/or lung inflammation, allergies, asthma, impeded respiration, respiratory distress syndrome condition selected from pulmonary vasociated with a disease or condition selected from pulmonary vasoconstruction, inflammation, allergies, pain, cystic fibrosis (CR), allergic thinitis (RR), pulmonary condition, ephysema, chronic obstructive pulmonary disease (COPP), pulmonary transplantation rejection, pulmonary infections, bronchitis, candyor cancer. AAFIB434 to AAFZ1543 represent human polynucleotide The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiniflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the fragments and antisense oligonucleotides used in the exemplification of

Gaps . 3.9%; Score 11.2; DB 1; Length 17; 81.2%; Pred. No. 7.9e+02; tive 0; Mismatches 3; Indels Sequence 17 BP; 6 A; 1 C; 8 G; 2 T; 0 U; 0 Other; Query Match 3.9 Best Local Similarity 81.2 Matches 13; Conservative

the present invention

. 0

Gaps

ö

822 807 CCTCCAACTCAGGGTT 17 cercearcreaecrir

à d

AAF18885 standard; DNA; 17 BP. RESULT 1208 AAF18885,

Query Match

```
AAF18885;
```

14-MAR-2001 (first entry)

Human adenosine Al receptor polynucleotide fragment #452.

Low adenosine antisense oligonucleotide; phosphorothioate; allergy; human; airway disorder; bronchoconstriction; lung inflammation; surfactant depletion; respiratory; bronchodilator; antinflammatory; immunosuppressive; antiasthmatic; analgesic; hypotensive; cytostatic; respiratory obstruction; pulmonary obstruction; impeded respiration; surfactant hypoproduction; pulmonary vasoconstriction; asthma; RDS; respiratory distress syndrome; pain; cystic fibrosis; allergic rhinitis; chronic hypotension; emphysema; pulmonary transplantation rejection; chronic obstructive pulmonary disease; pulmonary infection; bronchitis; cancer; ss.

Homo sapiens.

W0200062736-A2.

26-OCT-2000.

24-MAR-2000; 2000WO-US008020.

06-APR-1999; 99US-0127958P

(UYEC-) UNIV EAST CAROLINA.

(NYCE/) NYCE J W.

Nyce JW;

WPI; 2000-679539/66.

Low adenosine (A) content antisense oligonucleotides which do not trigger adenosine receptors during metabolism, useful e.g. for treating cancers and respiratory obstructions.

Claim 14; Page 113; 1592pp; English.

The present invention describes low adenosine (A) content antisense oligonucleotides and compositions (I) comprising them. In the antisense oligonucleotides the A is replaced by a 'Universal' or alternative base. (I) can have respiratory, bronchodilator, antiinflammatory, analgesic, immunosuppressive, antiasthmatic, hypotensive and cytostatic activities. The antisense oligonucleotides and (I) can be used to down-regulate the expression and or activity of target polypeptides associated with cardivaling peptide factors and malignancies, such as stimulating and cardivaling peptide factors and transmitters, cranscription factors, immunoglobulins and antibodies, antibody receptors, cytokines and chemokines, endogenously produced specific and non-specific enzymes, binding proteins, adhesion molecules and their receptors, cytokine and chemokine receptors, adenosine receptors, bradykinin receptors, central nervous system (CNS) and peripheral nervous and non-nervous system (CNS) and peripheral nervous and non-nervous system creceptors, defensins, growth factors, vasocative peptides and receptors, binding proteins and malignancy associated proteins. The ransmitters, defensins, growth factors, vasocative peptides and receptors, binding proteins and malignancy associated proteins. The antisense oligonucleotides may be used in this way to treat disorders including respiratory obstruction (especially pulmonary obstruction) and/or lung inflammation, allergies, asthma, impeded respiratory vasoconstriction, inflammation, allergies, asthma, impeded respiration, respiratory disease or condition selected from pulmonary vasoconstriction, inflammation, hypertension, emphysema, chronic obstructive pulmonary disease (CDD), pulmonary transplantation rejection, pulmonary undertions, bronchitis, and/or cancer. AAF18434 to AAF1543 represent human polynucleotides in the present invention

Sequence 17 BP; 6 A; 1 C; 8 G; 2 T; 0 U; 0 Other;

Length 17;

DB 1;

Score 11.2;

3.98;

```
This introduction describes a movet use of institution describes a movet use of institution describes a movet use of institutions of lactobacillus delbrueckii (II) or Lactobacillus helveticus (III). (I) are used as tools for genetically modifying the genome of (III) and (III). This has applications in screening experiments to identify relevant genetic functionalities, for integration experiments or for gene expression onto the bacterial genome of (II) or (III). (II) and (III) are used for the preparation of a fermented product, secondary metabolites, betacory alactosidase, cell wall protease, catabolite control protein A, lactate dehydrogenase, glycosyltransferase, a restriction system, a lysogenic corpopatage or the permesse of the lac operon, where the gene is inactivated by insertion of at least 1 IS element. (I) are also useful for gene tagging, gene inactivation and integration and/or gene expression on a plasmid and/or genomic level. Prior art IS elements were not used for codifying Lactobacillus, as this species, used for yoghurt production, were difficult to modify. (I) provide new genetic tools for Lactobacillus species which are used for many processes such as gene tagging, unlike prior art lactobacilli IS elements, which are very limited. The modified prior art lactobacilli IS elements, which are very limited. The modified
                                          o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      This invention describes a novel use of insertion sequences (IS) elements
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Use of insertion sequence elements for modifying the genomes of Lactobacillus bacteria, useful for screening and integration experiments.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acidification and bitter taste which occurs during storage, is significantly reduced. This sequence represents a PCR primer used in the
                                                                                                                                                                                                                                                                                                                                                                                 Insertion sequence; IS element; yoghurt; secondary metabolite; beta-galactosidase; cell wall protease; catabolite control protein A; lactate dehydrogenase; glycosyltransferase; lysogenic prophage; lac operon permease; ISL5; PCR primer; ss.
                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               prior art lactobacilli IS elements, which are very limited. The mod
bacterial strains are useful for producing a yoghurt in which post-
                                          .;
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 7.9e+02;
ive 0; Mismatches 3; Indels
                                          Indels
                                                                                                                                                                                                                                                                                                                                           L. delbruekii insertion sequence ISL5 PCR primer 2.
. 7.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 17 BP; 6 A; 5 C; 3 G; 3 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   detection of the insertion sequence element ISL5
                  Pred. No. 7.9e
]; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lapierre L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 11; 19pp; English.
    81.2%; Pic.
                                                                                                                                                                                                                         BP.
                                                                              807 CCTCCAACTCAGGGTT 822
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            98EP-00202028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    98EP-00202028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ilarity 81.2%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (NEST ) SOC PROD NESTLE SA.
                                                                                                                                                                                                                     AAZ44071 standard; DNA; 17
                                                                                                                                                                                                                                                                                                     (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lactobacillus delbrueckii,
                                                                                                                    16 cercearcreagerrr
                                     13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Germond JE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2000-074582/07.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
nes 13; Conserv
              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            17-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17-JUN-1998;
                                                                                                                                                                                                                                                                                                   23-MAR-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3P965643-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-DEC-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mollet B,
                                                                                                                                                                                                                                                               AAZ44071;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                               RESULT 1209
                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                ò
                                                                                                                    g
```

ð a

```
AAA25008
ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       *****
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PCR primers AAZ61023-24 were used to amplify a probe (AAZ61024) which is used to isolate Zea mays delta9-desaturase DNA. The specification describes a construct encoding an antibody that can bind a transit peptide that directs an associated passenger protein to a plant cell organelle. The transit peptide sequence of the maize stearoyl-ACP- delta9-desaturase (delta9-desaturase) was determined, and used to produce antibodies of the invention. These antibodies were produced in transgenic plants of the invention. The constructs of the invention are useful for producing antibodies which decrease steady state levels of passenger proteins in the organelles of plant cells and plants, by binding to the transit peptide. This results in the production of transgenic plants which have altered steady state passenger protein levels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel nucleic acid construct for down-regulating steady state levels of proteins in plant cells, transgenic plants and their progeny.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1491.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Strickland JA, Folkerts O;
                                                                                                                                                                                                                                                                                                                                           Delta9-desaturase, antibody, transit peptide, passenger protein, plant cell organelle, maize, stearoyl-ACP-delta9-desaturase, transgenic plant, PCR primer, ss.
                                                                                                                                                                                                                                                                                                    primer used to amplify a probe for a maize delta9-desaturase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ·,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.9%; Score 11.2; DB 1; Length 17; 58.8%; Pred. No. 7.9e+02; iive 4; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17 BP; 5 A; 1 C; 5 G; 0 T; 0 U; 6 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sukhapinda K, Hasler JM, Petell JK,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Claim 21; Page 78; 114pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP.
                                                                                                                                                                AAZ61023 standard; DNA; 17 BP.
    CAGTIGGAACACITIC 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99WO-US016405.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             98US-0093587P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (DOWC ) DOW AGROSCIENCES LLC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              17 CCRTGNCKRTTYTCYTC 1
                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   825 CIGIGICICITITICITIC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAA24993 standard; DNA; 17
                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19-JUL-2000 (first entry)
                                        CGGTTGGAACGALTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 58.8
Matches 10; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI; 2000-182711/16.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        WO200005391-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21-JUL-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21-JUL-1998;
                                                                                                                                                                                                                                                         30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    03-FEB-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                             Zea mays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAA24993;
    864
                                             17
                                                                                                                                                                                                              AAZ61023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 1211
                                                                                                                                                                                                                                                                                                       PCR ]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAA24993
                                                                                                                                                                                                                SON COURSE SERVING SER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      à
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BXAXAXA
```

```
with a target sequence and contain at least one phosphoro(di)thicate
link, having endonuclease activity. (A), and more generally any catalytic
uncleic acid (A) that medulates expression of the oestrogen receptor
gene, are used to treat cancer (particularly of breast or endometrium),
in vivo or by transforming cells ex vivo and implanting treated cells, or
for other conditions associated with levels of oestrogen receptor.
Because of the high selectivity for targeted RNA, (A) can also be used
correlate inhibition of gene expression with alterations in phenotype,
particularly for identification of therapeutic targets, and as research
reagents (for RNA, in the same way that restriction endomucleases are
used with DNA). The combination of modifications in (A) improves
tesistance to nucleases, binding affinity and/or activity. AAA23503 to
AAA24748 to AAA25092 represent their corresponding target sequences.
AAA25095 represent cestrogen receptor hammerhead ribozyme sequences.
AAA26105 represent cestrogen receptor hatroin ribozyme
sequences, and AAA26107 to AAA2621 represent their corresponding target
sequences and AAA26107 to AAA2621 represent their ribozyme sequences and
antisense oligonucleotides used in the exemplification of the present
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   nucleic acids that interact, and optionally cleave, target sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The present invention describes nucleic acids (A) that interact stably
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Oestrogen receptor hammerhead ribozyme target sequence SEQ ID NO:1506.
   Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage; hammerhead ribozyme; claavage; hammerhead ribozyme; chairpin ribozyme; antisense oligonucleotide; gene expression modification; cancer; phosphorothioate; endonuclease; anticancer; breast cancer; endometrium cancer; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bellon L;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Oestrogen receptor; c-raf; k-ras; bcl-2; ribozyme; cleavage;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.9%; Score 11.2; DB 1; Length 17;
81.2%; Pred. No. 7.9e+02;
rative 0; Mismatches 3; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Karpeisky A,
Haeberli P;
receptor; c-raf; k-ras; bcl-2; ribozyme;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 17 BP; 2 A; 6 C; 5 G; 4 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ll, Mcswiggen JA,
Jarvis T, Woolf T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 77; Page 65; 148pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             863
                                                                                                                                                                                                                                                                                                                                                                                                                                                     98US-0082404P.
98US-00103636.
                                                                                                                                                                                                                                                                                                                                                                                    99WO-US008547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Beigelman L,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAA25008 standard; DNA; 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (RIBO-) RIBOZYME PHARM INC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             848 GACAGCGTCCTGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAGCTCCCTGGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zwick M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           used to treat cancer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WPI; 2000-013248/01.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Thompson JD, Beig
Reynolds M, Zwick
Matulic-Adamic J;
                                                                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                  WO9954459-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                     20-APR-1998;
23-JUN-1998;
                                                                                                                                                                                                                                                                                                                                                                                    19-APR-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              19-JUL-2000
                                                                                                                                                                                                                                                                                                                   28-OCT-1999.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAA25008;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
```

0